



Book of Bibliography by course

School of Computer Science

- 2023-I-

: March 7, 2023

Task Force

Ernesto Cuadros-Vargas (Editor) <ecuadros@spc.org.pe>

President of the Peruvian Computer Society (SPC) 2001-2007, 2009

Member of the Steering Committee de ACM/IEEE-CS Computing Curricula
for Computer Science (CS2013)

Member of Steering Committee de ACM/IEEE-CS Computing Curricula 2020
(CS2020)

<http://socios.spc.org.pe/ecuadros>

Contents

First Semester	1
1.1 CS111. Computing Foundations	1
1.2 CS1D1. Discrete Structures I	1
1.3 MA100. Mathematics I	1
1.4 FG101. Communication	1
1.5 FG102. Study Methodology	2
Second Semester	2
2.1 CS112. Computer Science I	2
2.2 CS1D2. Discrete Structures II	2
2.3 MA101. Math II	2
2.4 FG106. Theater	2
Third Semester	2
3.1 CS113. Computer Science II	3
3.2 CS221. Computer Systems Architecture	3
3.3 CS221. Computer Systems Architecture	4
3.4 CS2B1. Platform Based Development	4
3.5 FG203. Oratory	5
Fourth Semester	5
4.1 CS210. Algorithms and Data Structures	5
4.2 CS211. Theory of Computation	5
4.3 CS271. Data Management	5
4.4 CS2S1. Operating systems	6
4.5 MA203. Statistics and Probabilities	6
4.6 FG350. Leadership and Performance	6
Fifth Semester	7
5.1 CS212. Analysis and Design of Algorithms	7
5.2 CS272. Databases II	8
5.3 CS291. Software Engineering I	8
5.4 CS342. Compilers	8
5.5 CB111. Computational Physics	9

Sixth Semester	9
6.1 CS261. Intelligent Systems	9
6.2 CS292. Software Engineering II	10
6.3 CS311. Competitive Programming	10
6.4 CS312. Advanced Data Structures	11
6.5 CS393. Information systems	12
6.6 MA307. Mathematics applied to computing	12
Seventh Semester	12
7.1 CS231. Networking and Communication	12
7.2 CS2H1. User Experience (UX)	12
7.3 CS391. Software Engineering III	13
7.4 CS401. Methodology of Computation Research	13
7.5 CS251. Computer graphics	13
7.6 CS262. Machine learning	14
7.7 CS2T1. Computational Biology	14
Eighth Semester	14
8.1 CS281. Computing in Society	14
8.2 CS3I1. Computer Security	14
8.3 CS3P1. Parallel and Distributed Computing	14
8.4 CS402. Capstone Project I	15
8.5 CS361. Computational Vision	15
8.6 CS371. Data Analysis	15
8.7 CS3T1. Information Processing in Biological Cells	15
8.8 CS3T2. Omic Data Modeling	15
8.9 ET201. Entrepreneurship I	15
Ninth Semester	16
9.1 CS370. Big Data	16
9.2 CS403. Final Project II	16
9.3 CS351. Topics in Computer Graphics	17
9.4 CS362. Natural Language Processing	17
9.5 CS363. Learning by Reinforcement	17
9.6 CS372. Web mining	17
9.7 CS373. Data Visualization	17
9.8 CS392. Tópicos en Ingeniería de Software	17
9.9 CS3T3. Bioinformatic Algorithms	17
9.10 CS3T4. Computational Genetics	17
9.11 CB309. Bioinformatics	17
9.12 ET301. Entrepreneurship II	18
Tenth Semester	18
10.1 CS365. Evolutionary Computing	18
10.2 CS3P2. Cloud Computing	18
10.3 CS3P3. Internet of Things	19
10.4 CS404. Final Project III	19
10.5 CS364. Cognitive Computing	20
10.6 CS366. Robotics	20
10.7 CS369. Topics in Artificial Intelligence	20

10.8 CS374. Text Processing for Data Science	21
--	----

10.9 CS379. Tópicos Avanzados en Ciencia de Datos	21
---	----

10.10CS3T5. Modeling and Simulation of Biological Systems	21
---	----

10.11CS3T9. Advanced Topics in Bioinformatics	21
---	----

10.12FG211. Professional Ethics	21
---	----

10.13ET302. Entrepreneurship III	22
--	----

1.1 CS111. Computing Foundations

[Brookshear and Brylow, 2019] Brookshear, J. G. and Brylow, D. (2019). *Computer Science: An Overview*. Pearson, global edition edition.

[Guttag, 2013] Guttag, J. V. (2013). . *Introduction To Computation And Programming Using Python*. MIT Press.

[Zelle, 2010] Zelle, J. (2010). *Python Programming: An Introduction to Computer Science*. Franklin, Beedle & Associates Inc.

1.2 CS1D1. Discrete Structures I

[Grimaldi, 2003] Grimaldi, R. (2003). *Discrete and Combinatorial Mathematics: An Applied Introduction*. Pearson, 5 ed. edition.

[Rosen, 2007] Rosen, K. H. (2007). *Discrete Mathematics and Its Applications*. Mc Graw Hill, 7 ed. edition.

[Scheinerman, 2012] Scheinerman, E. R. (2012). *Mathematics: A Discrete Introduction*. Brooks Cole, 3 ed. edition.

[Velleman, 2006] Velleman, D. J. (2006). *How to Prove It: A Structured Approach*. 2nd edition.

1.3 MA100. Mathematics I

[ión, 2014] ión, R. L. (2014). *Calculus*. 10th edition.

[Stewart, 2012] Stewart, J. (2012). *Calculus*. 7th edition.

1.4 FG101. Communication

[de la Lengua Española, 2010] de la Lengua Española, R. A. (2010). *Nueva gramática de la lengua española, morfología y sintaxis*. Madrid, España: Ed. Espasa.

[Gatti Muriel, 2007] Gatti Muriel, C. (2007). *Elementos de la gramática española*. Lima, Universidad del Pacífico.

[Martin Vivaldi, 2006] Martin Vivaldi, G. (2006). *Teoría y práctica de la composición y estilo*. Thompson.

[Sanchez Lobato, 2005] Sanchez Lobato, J. (2005). *Saber Escribir*. España, Instituto Cervantes.

1.5 FG102. Study Methodology

- [Chávez, 2011] Chávez, A. (2011). *Se necesita un tutor*. UCSP.
- [Perez, 2010] Perez, A. (2010). *Teoría del Derecho*. Editorial Madrid.
- [Quintana, 2007] Quintana, V. (2007). *El estudio Universitario y elementos de investigación científica*. Editorial universitaria.
- [Rodríguez, 2007] Rodríguez, J. (2007). *Guía para el método de estudio universitario*. Educa.
- [Velazco, 1999] Velazco, M. F. (1999). *Mapas conceptuales en el aula*. Ed. San Marcos.

2.1 CS112. Computer Science I

- [Deitel, 2017] Deitel, D. . (2017). *C++17- The Complete Guide*. Pearson, 10th edition.
- [Stroustrup, 2013] Stroustrup, B. (2013). *The C++ Programming Language*. Addison-Wesley, 4th edition.

2.2 CS1D2. Discrete Structures II

- [Grimaldi, 1997] Grimaldi, R. (1997). *Matemáticas Discretas y Combinatoria*. Addison Wesley Iberoamericana.
- [Grimaldi, 2003] Grimaldi, R. (2003). *Discrete and Combinatorial Mathematics: An Applied Introduction*. Pearson, 5 ed. edition.
- [Johnsonbaugh, 1999] Johnsonbaugh, R. (1999). *Matemáticas Discretas*. Prentice Hall, México.
- [Rosen, 2007] Rosen, K. H. (2007). *Discrete Mathematics and Its Applications*. Mc Graw Hill, 7 ed. edition.

2.3 MA101. Math II

- [Stewart, 2012] Stewart, J. (2012). *Calculus*. CENGAGE Learning, 7th edition.
- [Zill, 2013] Zill, D. G. (2013). *Differential equations with Boundary value problems*. CENGAGE Learning, 8th edition.

2.4 FG106. Theater

- [Majorana, 1958] Majorana, A. (1958). *El arte de hablar en publico*. La España Moderna.
- [Pavis, 1998] Pavis, P. (1998). *Diccionario del Teatro*. Edit. Piados BA.

3.1 CS113. Computer Science II

- [Lippman and E.Moo, 2013] Lippman, S. B. and E.Moo, B. (2013). *C++ Primer*. O'Reilly, 5th edition.
- [Nakariakov, 2013] Nakariakov, S. (2013). *The Boost C++ Libraries: Generic Programming*. CreateSpace Independent Publishing Platform.
- [Pai and Abraham, 2018] Pai, P. and Abraham, P. (2018). *C++ Reactive Programming*. Packt, 1st edition.
- [Van Weert, 2016] Van Weert, Peter, G. M. (2016). *C++ Standard Library Quick Reference*. Apress, 1st edition.
- [Vandervoorde, 2002] Vandervoorde, D. (2002). *C++ Templates: The Complete Guide*. Addison-Wesley, 1st edition.
- [Williams, 2011] Williams, A. (2011). *C++ Concurrency in Action*. Manning, 1st edition.

3.2 CS221. Computer Systems Architecture

- [Harris and Harris, 2012] Harris, D. and Harris, S. (2012). *Digital Design and Computer Architecture*. Morgan Kaufmann, 2nd edition.
- [Hennessy and Patterson, 2006] Hennessy, J. L. and Patterson, D. A. (2006). *Computer Architecture: A Quantitative Approach*. Morgan Kaufman, San Mateo, CA, 4th edition.
- [J.Ashenden, 2007] J.Ashenden, P. (2007). *Digital Design (Verilog): An Embedded Systems Approach Using Verilog*. Morgan Kaufmann.
- [Parhami, 2005] Parhami, B. (2005). *Computer Architecture: From Microprocessors to Supercomputers*. Oxford Univ. Press, New York.
- [Patt and Patel, 2005] Patt, Y. N. and Patel, S. J. (2005). *Introduction to Computing Systems*. McGraw Hill, 2nd edition.
- [Patterson and Hennessy, 2004] Patterson, D. A. and Hennessy, J. L. (2004). *Computer Organization and Design: The Hardware/Software Interface*. Morgan Kaufman, San Mateo, CA, 3 edition.
- [P.Chu, 2006] P.Chu, P. (2006). *RTL Hardware Design Using VHDL*. Wiley-Interscience, 1st edition.
- [Stalings, 2010] Stalings, W. (2010). *Computer Organization and Architecture: Designing for Performance*. Prentice Hall, Upper Saddle River, NJ, 8th edition.

3.3 CS221. Computer Systems Architecture

- [Harris and Harris, 2012] Harris, D. and Harris, S. (2012). *Digital Design and Computer Architecture*. Morgan Kaufmann, 2nd edition.
- [Hennessy and Patterson, 2006] Hennessy, J. L. and Patterson, D. A. (2006). *Computer Architecture: A Quantitative Approach*. Morgan Kaufman, San Mateo, CA, 4th edition.
- [J.Ashenden, 2007] J.Ashenden, P. (2007). *Digital Design (Verilog): An Embedded Systems Approach Using Verilog*. Morgan Kaufmann.
- [Parhami, 2005] Parhami, B. (2005). *Computer Architecture: From Microprocessors to Supercomputers*. Oxford Univ. Press, New York.
- [Patt and Patel, 2005] Patt, Y. N. and Patel, S. J. (2005). *Introduction to Computing Systems*. McGraw Hill, 2nd edition.
- [Patterson and Hennessy, 2004] Patterson, D. A. and Hennessy, J. L. (2004). *Computer Organization and Design: The Hardware/Software Interface*. Morgan Kaufman, San Mateo, CA, 3 edition.
- [P.Chu, 2006] P.Chu, P. (2006). *RTL Hardware Design Using VHDL*. Wiley-Interscience, 1st edition.
- [Stalings, 2010] Stalings, W. (2010). *Computer Organization and Architecture: Designing for Performance*. Prentice Hall, Upper Saddle River, NJ, 8th edition.

3.4 CS2B1. Platform Based Development

- [Annuzzi et al., 2013] Annuzzi, J., Darcey, L., and Conder, S. (2013). *Introduction to Android Application Development: Android Essentials*. Developer's Library. Pearson Education.
- [Fielding, 2000] Fielding, R. T. (2000). Fielding dissertation: Chapter 5: Representational state transfer (rest). http://www.ics.uci.edu/~fielding/pubs/dissertation/rest_arch_style.htm.
- [Freeman and Robson, 2011] Freeman, E. and Robson, E. (2011). *Head first HTML5 programming: building web apps with JavaScript*. " O'Reilly Media, Inc."
- [Grove, 2009] Grove, R. (2009). *Web Based Application Development*. Jones & Bartlett Learning.
- [Martin, 2017] Martin, R. C. (2017). *Clean architecture: a craftsman's guide to software structure and design*. Prentice Hall Press.

3.5 FG203. Oratory

[Monroe and Ehninger, 1976b] Monroe, A. and Ehninger, D. (1976b). *La comunicación oral*. Hispano Europea.

[Rodríguez,] Rodríguez, M. L. *Cómo manejar la información en una presentación*.

4.1 CS210. Algorithms and Data Structures

[Cormen et al., 2009] Cormen, T. H., Leiserson, C. E., Rivest, R. L., and Stein, C. (2009). *Introduction to Algorithms*. MIT Press, third edition edition. ISBN: 978-0-262-53305-8.

[Fager et al., 2014] Fager, J., Yépez, W. L. P., Villacrés, M., Martínez, L. A. P., Ochoa, D., and Cuadros-Vargas, E. (2014). *Estructura de datos*. Iniciativa Latinoamericana de Libros de Texto Abiertos (LATIN), first edition edition.

[Knuth, 1997] Knuth, D. E. (1997). *The Art of Computer Programming, Vol. 1: Fundamental Algorithms*. Addison-Wesley Professional, 3rd edition.

[Knuth, 1998] Knuth, D. E. (1998). *The art of computer programming, volume 3: Sorting and searching*. Addison-Wesley Professional, 2nd edition.

4.2 CS211. Theory of Computation

[Brookshear, 1993] Brookshear, J. G. (1993). *Teoría de la Computación*. Addison Wesley Iberoamericana.

[Hopcroft and Ullman, 2013] Hopcroft, J. E. and Ullman, J. D. (2013). *Introducción a la Teoría de Autómatas, Lenguajes y Computación*. Pearson Education.

[Linz, 2011] Linz, P. (2011). *An Introduction to Formal Languages and Automata*. Jones and Bartlett Learning, 5th edition.

[Martin, 2010] Martin, J. (2010). *Introduction to Languages and the Theory of Computation*. McGraw-Hill, 4th edition.

[Sipser, 2012] Sipser, M. (2012). *Introduction to the Theory of Computation*. Cengage Learning, 3rd edition.

4.3 CS271. Data Management

[Celko, 2005] Celko, J. (2005). *Joe Celko's SQL Programming Style*. Elsevier.

[C.J., 2011] C.J., D. (2011). *SQL and Relational Theory: How to Write Accurate SQL Code*. O'Reilly Media.

[Dietrich, 2001] Dietrich, S. W. (2001). *Understanding Relational Database Query Languages, First Edition*. Prentice Hall.

-
- [Elmasri and Navathe, 2004] Elmasri, R. and Navathe, S. B. (2004). *Fundamentals of Database Systems, Fourth Edition*. Addison Wesley.
- [Emil Eifrem and Robinson, 2015] Emil Eifrem, J. W. and Robinson, I. (2015). *Graph Databases*. O'Reilly Media, 2nd edition.
- [Korth and Silberschatz, 2002] Korth, H. F. and Silberschatz, A. (2002). *Fundamentos de Base de Datos*. McGraw-Hill.
- [Ramakrishnan and Gehrke, 2003] Ramakrishnan, R. and Gehrke, J. (2003). *Database Management Systems*. McGraw-Hill, 3rd edition.
- [Rob and Coronel, 2004] Rob, P. and Coronel, C. (2004). *Database Systems: Design, Implementation and Management, Sixth Edition*. Morgan Kaufmann.
- [Simsion and Witt, 2004] Simsion, G. and Witt, G. (2004). *Data Modeling Essentials, Third Edition*. Morgan Kaufmann.
- [Whitehorn and Marklyn, 2001] Whitehorn, M. and Marklyn, B. (2001). *Inside Relational Databases, Second Edition*. Springer.

4.4 CS2S1. Operating systems

- [Anderson and Dahlin, 2014] Anderson, T. and Dahlin, M. (2014). *Operating Systems: Principles and Practice*. Recursive Books, 2nd edition.
- [Avi Silberschatz, 2012] Avi Silberschatz, Peter Baer Galvin, G. G. (2012). *Operating System Concepts, 9/E*. John Wiley & Sons, Inc.
- [Stallings, 2005] Stallings, W. (2005). *Operating Systems: Internals and Design Principles, 5/E*. Prentice Hall.
- [Tanenbaum, 2001] Tanenbaum, A. S. (2001). *Modern Operating Systems, 4/E*. Prentice Hall.
- [Tanenbaum, 2006] Tanenbaum, A. S. (2006). *Operating Systems Design and Implementation, 3/E*. Prentice Hall.

4.5 MA203. Statistics and Probabilities

- [Mendenhall, 2014] Mendenhall, B. (2014). *Introducción a la probabilidad y estadística*. Cengage Learning, 13th edition.
- [M.Ross, 2014] M.Ross, S. (2014). *Introduction to Probability and Statistics for Engineers and Scientists*. Academic Press, 5th edition.

4.6 FG350. Leadership and Performance

- [Alexandre., 2009] Alexandre., D.-H. (2009). *Perfil del Líder. Hacia un Liderazgo Virtuoso*. Ediciones Urano S.A.
- [Alfred., 2010] Alfred., S. (2010). *Liderazgo Ético. La Sabiduría de decidir bien*. Ediciones Encuentro S.A Madrid y Nueva Revista de Madrid.

-
- [Cardona,] Cardona, P., y. P. C. R. *Dirección por misiones: Cómo generar empresas de alto rendimiento.*
- [D' Souza,] D' Souza, S. A. *Descubre tu Liderazgo.* Editorial Sal Terrae.
- [Ginebra, 2010] Ginebra, G., . S. G. G. (2010). *Gestión de incompetentes. Libros de Cabecera.*
- [Goleman, 2012] Goleman, D. (2012). *Inteligencia emocional.* Editorial Kairós.
- [Hawkins, 2012] Hawkins, P. (2012). *Coaching y liderazgo de equipos: coaching para un liderazgo con capacidad de transformación.* Ediciones Granica.
- [Hersey, 1998] Hersey, P., B. K. H. . J. D. E. (1998). *Administración del comportamiento organizacional: liderazgo situacional.*
- [Hunsaker, 2010] Hunsaker, P. (2010). *El nuevo arte de gestionar equipos: Un enfoque actual para guiar y motivar con éxito.*
- [Luis., 2008] Luis., H. (2008). *Construye tu Sueño.* LID Editorial Empresarial.
- [Manuel., 2009] Manuel., F. P. (2009). *Gobierno de Personas en la Empresa.* Ediciones Universidad de Navarra EUNSA.
- [Maruja., 2007] Maruja., C. N. (2007). *Dueños de Nuestro Destino.* Editorial Ariel.
- [Pilar, 2002] Pilar, C. P. L. (2002). *Cómo desarrollar las Competencias de Liderazgo.* PAD Lima- Perú, Tercera Edición.
- [Wilkinson., 2009] Wilkinson., C. P. H. (2009). *Creciendo como Líder.* Ediciones Universidad de Navarra S.A (EUNSA), Primera Edición.

5.1 CS212. Analysis and Design of Algorithms

- [Alsuwaiyel, 1999] Alsuwaiyel, H. (1999). *Algorithms: Design Techniques and Analysis.* World Scientific.
- [Dasgupta et al., 2006] Dasgupta, S., Papadimitriou, C., and Vazirani, U. (2006). *Algorithms.* McGraw-Hill Education.
- [Goodrich and Tamassia, 2009] Goodrich, M. T. and Tamassia, R. (2009). *Algorithm Design: Foundations, Analysis and Internet Examples.* John Wiley & Sons, Inc., 2nd edition.
- [Kleinberg and Tardos, 2005] Kleinberg, J. and Tardos, E. (2005). *Algorithm Design.* Addison-Wesley Longman Publishing Co., Inc.
- [Knuth, 1997] Knuth, D. (1997). *The Art of Computer Programming: Fundamental algorithms Vol 1.* Addison-Wesley, third edition edition.
- [Rawlins, 1992] Rawlins, G. (1992). *Compared to What?: An Introduction to the Analysis of Algorithms.* Computer Science Press.

- [Rivest and Stein, 2009] Rivest, T. H. C. C. E. L. . R. L. and Stein, C. (2009). *Introduction to Algorithms, Third Edition*. The MIT Press, 3rd edition.
- [Sedgewick and Flajolet, 2013] Sedgewick, R. and Flajolet, P. (2013). *An Introduction to the Analysis of Algorithms*. Pearson Education.
- [Sedgewick and Wayne, 2011] Sedgewick, R. and Wayne, K. (2011). *Algorithms*. Pearson Education.
- [Tarjan, 1983] Tarjan, R. E. (1983). *Data Structures and Network Algorithms*. Society for Industrial and Applied Mathematics.

5.2 CS272. Databases II

- [Burleson, 2004] Burleson, D. K. (2004). *Physical Database Design Using Oracle*. CRC Press.
- [Celko, 2005] Celko, J. (2005). *Joe Celko's SQL Programming Style*. Elsevier.
- [M. Tamer Ozsü, 1999] M. Tamer Ozsü, P. V. (1999). *Principles of Distributed Database Systems, Second Edition*. Prentice Hall.
- [Peter Brusilovsky, 1998] Peter Brusilovsky, Alfred Kobsa, J. V. (1998). *Adaptive Hypertext and Hypermedia, First Edition*. Springer.
- [Philip A. Bernstein, 1997] Philip A. Bernstein, E. N. (1997). *Principles of Transaction Processing, First Edition*. Morgan Kaufmann.
- [Ramez Elmasri, 2004] Ramez Elmasri, S. B. N. (2004). *Fundamentals of Database Systems, Fourth Edition*. Addison Wesley.

5.3 CS291. Software Engineering I

- [Eric Freeman and Sierra, 2014] Eric Freeman, Elisabeth Robson, B. B. and Sierra, K. (2014). *Head First Design Patterns*. O'Reilly Media, Inc, 2nd edition.
- [Hans-Erik Eriksson and Fado, 2003] Hans-Erik Eriksson, Magnus Penker, B. L. and Fado, D. (2003). *UML 2 Toolkit*. Wiley, 2nd edition.

5.4 CS342. Compilers

- [Aho et al., 2011] Aho, A., Lam, M., Sethi, R., and Ullman, J. D. (2011). *Compilers Principles Techniques And Tools*. Pearson, 2nd edition. ISBN:10-970-26-1133-4.
- [Appel, 2002] Appel, A. W. (2002). *Modern compiler implementation in Java*. Cambridge University Press, 2.a edición edition.
- [Louden, 2004a] Louden, K. C. (2004a). *Compiler Construction: Principles and Practice*. Thomson.

[Louden, 2004b] Louden, K. C. (2004b). *Lenguajes de Programacion*. Thomson.

[Teufel and Schmidt, 1998] Teufel, B. and Schmidt, S. (1998). *Fundamentos de Compiladores*. Addison Wesley Iberoamericana.

5.5 CB111. Computational Physics

[Burbano, 2006] Burbano, S. (2006). *Física General*. Alfaomega.

[Resnik, 2007] Resnik, R. y Halliday, D. (2007). *Física*, volume 1. Patria, 5th edition.

[Serway, 2009] Serway, R. A. y Jewett, J. (2009). *Física para Ciencias e Ingeniería con Física Moderna*, volume 1. Cengage Learning, 7th edition.

[Tipler, 2009] Tipler, P. y Mosca, G. (2009). *Física para la ciencia y la tecnología*, volume 1. Reverte, 7th edition.

6.1 CS261. Intelligent Systems

[De Castro, 2006] De Castro, L. (2006). *Fundamentals of natural computing: basic concepts, algorithms, and applications*. CRC Press.

[Goldberg, 1989] Goldberg, D. (1989). *Genetic Algorithms in Search, Optimization and Machine Learning*. Addison Wesley.

[Koller and Friedman, 2009] Koller, D. and Friedman, N. (2009). *Probabilistic Graphical Models: Principles and Techniques - Adaptive Computation and Machine Learning*. The MIT Press.

[Mitchell, 1998] Mitchell, M. (1998). *An introduction to genetic algorithms*. The MIT press.

[Murphy, 2012] Murphy, K. P. (2012). *Machine Learning: A Probabilistic Perspective*. The MIT Press.

[Nilsson, 2001] Nilsson, N. (2001). *Inteligencia Artificial: Una nueva visión*. McGraw-Hill.

[Ponce-Gallegos et al., 2014] Ponce-Gallegos, J., Torres-Soto, A., tima Quezada Aguilera, Silva-Sprock, A., Flor, E. M., Casali, A., Scheihing, E., Tupac, Y., Soto, M. T., Zapata, F. O., A., J. H., D., C. Z., Vakhnia, N., and Pedreño, O. (2014). *Inteligencia Artificial*. Iniciativa Latinoamericana de Libros de Texto Abiertos (LATIn).

[Russell and Norvig, 2003] Russell, S. and Norvig, P. (2003). *Inteligencia Artificial: Un enfoque moderno*. Prentice Hall.

6.2 CS292. Software Engineering II

- [Ambriola, 2001] Ambriola, V. (2001). *Software Process Technology*. Springer.
- [Blum, 1992] Blum, B. I. (1992). *Software Engineering: A Holistic View*. Oxford University Press US, 7th edition.
- [Conradi, 2000] Conradi, R. (2000). *Software Process Technology*. Springer.
- [Keyes, 2004] Keyes, J. (2004). *Software Configuration Management*. CRC Press.
- [Montangero, 1996] Montangero, C. (1996). *Software Process Technology*. Springer.
- [Oquendo, 2003] Oquendo, F. (2003). *Software Process Technology*. Springer.
- [Pressman, 2004] Pressman, R. S. (2004). *Software Engineering: A Practitioner's Approach*. McGraw-Hill, 6th edition.
- [Priest and Sanchez, 2001] Priest, J. W. and Sanchez, J. M. (2001). *Product Development and Design for Manufacturing*. Marcel Dekker.
- [Schach, 2004] Schach, S. R. (2004). *Object-Oriented and Classical Software Engineering*. McGraw-Hill.
- [Wang and King, 2000] Wang, Y. and King, G. (2000). *Software Engineering Processes: Principles and Applications*. CRC Press.
- [Windle and Abreo, 2002] Windle, D. R. and Abreo, L. R. (2002). *Software Requirements Using the Unified Process*. Prentice Hall.

6.3 CS311. Competitive Programming

- [Aziz et al., 2012] Aziz, A., Lee, T., and Prakash, A. (2012). *Elements of Programming Interviews: The Insiders' Guide*. ElementsOfProgrammingInterviews.com.
- [Cormen et al., 2009] Cormen, T. H., Leiserson, C. E., Rivest, R. L., and Stein, C. (2009). *Introduction to Algorithms*. MIT Press.
- [Halim, 2013] Halim, S. (2013). *Competitive Programming*. Lulu, 3rd edition.
- [Kulikov, 2019] Kulikov, A. S. (2019). *Learning Algorithms Through Programming and Puzzle Solving*. Active Learning Technologies.
- [Laaksonen, 2017] Laaksonen, A. (2017). *Guide to Competitive Programming: Learning and Improving Algorithms Through Contests*. Springer.
- [Miguel A. Revilla, 2003] Miguel A. Revilla, S. S. (2003). *Programming Challenges: The Programming Contest Training Manual*. Springer.

6.4 CS312. Advanced Data Structures

- [Björnander, 2018] Björnander, S. (2018). *C++17 By Example: Practical projects to get you up and running with C++17*. Packt Publishing.
- [Chávez et al., 2001] Chávez, E., Navarro, G., Baeza-Yates, R., and Marroquín, J. (2001). Proximity searching in metric spaces. *ACM Computing Surveys*, 33(3):273–321.
- [Cuadros-Vargas et al., 2004] Cuadros-Vargas, E., Romero, R. A. F., Mock, M., and Brisaboa, N. (2004). Implementing data structures: An incremental approach. <http://socios.spc.org.pe/ecuadros/cursos/pdfs/>.
- [David Vandevoorde, 2018] David Vandevoorde, Nicolai M. Josuttis, D. G. (2018). *C++ Templates: The Complete Guide*. Addison-Wesley Professional.
- [Gaede and ünther, 1998] Gaede, V. and ünther, O. (1998). Multidimensional Access Methods. *ACM Computing Surveys*, 30(2):170–231.
- [Gamma et al., 1994] Gamma, E., Helm, R., Johnson, R., and Vlissides, J. M. (1994). *Design Patterns: Elements of Reusable Object-Oriented Software*. Computing Series. Addison-Wesley Professional. ISBN-10: 0201633612.
- [Knuth, 2007a] Knuth, D. E. (2007a). *The Art of Computer Programming, Fundamental Algorithms*, volume I. Addison-Wesley, 3rd edition. 0-201-89683-4.
- [Knuth, 2007b] Knuth, D. E. (2007b). *The Art of Computer Programming, Sorting and Searching*, volume II. Addison-Wesley, 2nd edition. 0-201-89685-0.
- [Navarro, 2016] Navarro, G. (2016). *Compact Data Structures*. Cambridge University Press.
- [PGregory Shakhnarovich and Indyk, 2006] PGregory Shakhnarovich, T. D. and Indyk, P. (2006). *Nearest-Neighbor Methods in Learning and Vision: Theory and Practice*. MIT Press, 1st edition. ISBN 0-262-19547-X.
- [Samet, 2006] Samet, H. (2006). *Foundations of Multidimensional and Metric Data Structures*. Elsevier/Morgan Kaufmann, illustrated edition.
- [Traina Jr et al., 2000] Traina Jr, C., Traina, A. J. M., Seeger, B., and Faloutsos, C. (2000). Slim-Trees: High Performance Metric Trees Minimizing Overlap between Nodes. In *Advances in Database Technology - EDBT 2000, 6th International Conference on Extending Database Technology*, volume 1777 of *Lecture Notes in Computer Science*, pages 51–65, Konstanz, Germany. Springer.
- [Zezula et al., 2007] Zezula, P., Amato, G., Dohnal, V., and Batko, M. (2007). *Similarity Search: The Metric Space Approach*. Springer, 1st edition. ISBN-10: 0387291466.

6.5 CS393. Information systems

[Laudon and Laudon, 2017] Laudon, K. C. and Laudon, J. P. (2017). *Management Information Systems: Managing the Digital Firm*. Pearson, 15th edition.

[Pressman and Maxim, 2015] Pressman, R. S. and Maxim, B. (2015). *Software Engineering: A Practitioner's Approach*. McGraw-Hill, 8th edition.

[Sommerville, 2017] Sommerville, I. (2017). *Software Engineering*. Pearson, 10th edition.

6.6 MA307. Mathematics applied to computing

[Apóstol, 1973] Apóstol, T. M. (1973). *Calculus Vol II*. Editorial Reverté.

[Hirsh and Smale, 1974] Hirsh, M. W. and Smale, S. (1974). *Differential Equations, Dynamical Systems, and Linear Algebra*. Academia Press.

[Strang, 2003] Strang, G. (2003). *Introduction to Linear Algebra, 3^a edición*. Wellesley-Cambridge Press.

[Zill, 2002] Zill, D. G. (2002). *Ecuaciones Diferenciales con Problemas de Valores en la Frontera*. Thomson Learning.

7.1 CS231. Networking and Communication

[Chayapathi, 2016] Chayapathi, Rajendra; Syed F. Hassan; Shah, P. (2016). *Network Functions Virtualization (NFV) with a Touch of SDN*. Addison-Wesley Professional; 1 edition.

[Kadushin, 2011] Kadushin, C. (2011). *Understanding Social Networks: Theories, Concepts, And Findings*. Oxford University Press, Usa; 1 edition.

[Kurose and Ross, 2013] Kurose, J. and Ross, K. (2013). *Computer Networking: A Top-down Approach*. Always learning. Pearson, 7th edition.

7.2 CS2H1. User Experience (UX)

[Buxton, 2007] Buxton, B. (2007). *Sketching User Experiences: Getting the Design Right and the Right Design*. Morgan Kaufmann Publishers Inc.

[Dix et al., 2004] Dix, A., Finlay, J., Abowd, G., and Beale, R. (2004). *Human-computer Interaction*. Prentice-Hall, Inc, 3 ed. edition.

[Johnson, 2010] Johnson, J. (2010). *Designing with the Mind in Mind: Simple Guide to Understanding User Interface Design Rules*. Morgan Kaufmann Publishers Inc., 3 ed. edition.

-
- [Leavitt and Shneiderman, 2006] Leavitt, M. and Shneiderman, B. (2006). *Research-Based Web Design & Usability Guidelines*. Health and Human Services Dept.
- [Mathis, 2011] Mathis, L. (2011). *Designed for Use: Create Usable Interfaces for Applications and the Web*. Pragmatic Bookshelf.
- [Norman, 2004] Norman, D. A. (2004). *Emotional Design: Why We Love (or Hate) Everyday Things*. Basic Book.
- [Rogers and Sharp, 2011] Rogers, Y. and Sharp, H. & Preece, J. (2011). *Interaction Design: Beyond Human-Computer Interaction*. John Wiley and Sons Ltd, 3 ed. edition.
- [Stone et al., 2005] Stone, D., Jarrett, C., Woodroffe, M., and Minocha, S. (2005). *User Interface Design and Evaluation*. Morgan Kaufmann Series in Interactive Technologies.
- [Wigdor and Wixon, 2011] Wigdor, D. and Wixon, D. (2011). *Brave NUI World: Designing Natural User Interfaces for Touch and Gesture*. Morgan Kaufmann Publishers Inc.

7.3 CS391. Software Engineering III

- [Pressman and Maxim, 2015] Pressman, R. S. and Maxim, B. (2015). *Software Engineering: A Practitioner's Approach*. McGraw-Hill, 8th edition.
- [Sommerville, 2017] Sommerville, I. (2017). *Software Engineering*. Pearson, 10th edition.

7.4 CS401. Methodology of Computation Research

- [Association for Computing Machinery, 2008] Association for Computing Machinery (2008). *Digital Libray*. Association for Computing Machinery. <http://portal.acm.org/dl.cfm>.
- [CiteSeer.IST, 2008] CiteSeer.IST (2008). *Scientific Literature Digital Library*. College of Information Sciences and Technology, Penn State University. <http://citeseer.ist.psu.edu>.
- [IEEE-Computer Society, 2008] IEEE-Computer Society (2008). *Digital Libray*. IEEE-Computer Society. <http://www.computer.org/publications/dlib>.

7.5 CS251. Computer graphics

- [Hearn and Baker, 1990] Hearn, D. and Baker, P. (1990). *Computer Graphics in C*. Prentice Hall.
- [Hughes et al., 2013] Hughes, J. F., Dam, A. V., Mcguire, M., Sklar, D. F., Foley, J. D., Feiner, S. K., and Akeley, K. (2013). *Computer Graphics - Principles and Practice 3rd Edition*. Addison-Wesley.

[Shreiner et al., 2013] Shreiner, D., Sellers, G., Kessenich, J., and Licea-Kane, B. (2013). *OpenGL, Programming Guide, Eighth Edition*. Addison-Wesley.

[Wolff, 2011] Wolff, D. (2011). *OpenGL 4.0 Shading Language Cookbook*. Packt Publishing.

7.6 CS262. Machine learning

7.7 CS2T1. Computational Biology

8.1 CS281. Computing in Society

[Ediciones, 2009a] Ediciones, D., editor (2009a). *Revista Datamation MC Ediciones*.

[Ediciones, 2009b] Ediciones, D., editor (2009b). *Understanding the Digital Economy*.

[Ediciones, 2010] Ediciones, D., editor (2010). *Financial Times Mastering Information Management*.

[Jr, 2000] Jr, R. M. (2000). *Sistemas de Información Gerencial*. Prentice Hall.

[Laudon and Laudon, 2004] Laudon, K. C. and Laudon, J. P. (2004). *Sistemas de Información Gerencial*. Prentice Hall.

8.2 CS3I1. Computer Security

[W and L, 2014] W, S. and L, B. (2014). *Computer Security: Principles and Practice*. Pearson Education, Limited.

8.3 CS3P1. Parallel and Distributed Computing

[Georg Hager, 2010] Georg Hager, G. W. (2010). *Introduction to High Performance Computing for Scientists and Engineers (Chapman & Hall/CRC Computational Science)*. 1st edition.

[Kirk and mei W. Hwu, 2013] Kirk, D. B. and mei W. Hwu, W. (2013). *Programming Massively Parallel Processors: A Hands-on Approach*. Morgan Kaufmann, 2nd edition.

[Matloff, 2014] Matloff, N. (2014). *Programming on Parallel Machines*. University of California, Davis.

[Pacheco, 2011] Pacheco, P. S. (2011). *An Introduction to Parallel Programming*. Morgan Kaufmann, 1st edition.

[Quinn, 2003] Quinn, M. J. (2003). *Parallel Programming in C with MPI and OpenMP*. McGraw-Hill Education Group, 1st edition.

[Sanders and Kandrot, 2010] Sanders, J. and Kandrot, E. (2010). *CUDA by Example: An Introduction to General-Purpose GPU Programming*. Addison-Wesley Professional, 1st edition.

8.4 CS402. Capstone Project I

[Association for Computing Machinery, 2008] Association for Computing Machinery (2008). *Digital Library*. Association for Computing Machinery. <http://portal.acm.org/dl.cfm>.

[CiteSeer.IST, 2008] CiteSeer.IST (2008). *Scientific Literature Digital Library*. College of Information Sciences and Technology, Penn State University. <http://citeseer.ist.psu.edu>.

[IEEE-Computer Society, 2008] IEEE-Computer Society (2008). *Digital Library*. IEEE-Computer Society. <http://www.computer.org/publications/dlib>.

8.5 CS361. Computational Vision

[Goldberg, 1989] Goldberg, D. (1989). *Genetic Algorithms in Search, Optimization and Machine Learning*. Addison Wesley.

[Haykin, 1999] Haykin, S. (1999). *Neural networks: A Comprehensive Foundation*. Prentice Hall.

[Russell and Norvig, 2003] Russell, S. and Norvig, P. (2003). *Inteligencia Artificial: Un enfoque moderno*. Prentice Hall.

8.6 CS371. Data Analysis

8.7 CS3T1. Information Processing in Biological Cells

8.8 CS3T2. Omic Data Modeling

8.9 ET201. Entrepreneurship I

[Blank and Dorf, 2012] Blank, S. and Dorf, B. (2012). *The Startup Owner's Manual: The Step-By-Step Guide for Building a Great Company*. K and S Ranch.

[Byers et al., 2010] Byers, T., Dorf, R., and Nelson, A. (2010). *Technology Ventures: From Idea to Enterprise*. McGraw-Hill Science.

[Congreso de la Republica del Perú, 1996] Congreso de la Republica del Perú (1996). *Decreto Legislativo N°823. Ley de la Propiedad Industrial*. El Peruano.

[de la Republica del Peru, 1997] de la Republica del Peru, C. (1997). *Ley N°26887. Ley General de Sociedades*. El Peruano.

-
- [Garzozzi-Pincay et al., 2014] Garzozzi-Pincay, R., Messina-Scolaro, M., Moncada-Marino, C., Ochoa-Luna, J., Ilabel-Pérez, G., and Zambrano-Segura, R. (2014). *Planes de Negocios para Emprendedores*. Iniciativa Latinoamericana de Libros de Texto Abiertos (LATIn).
- [Osterwalder and Pigneur, 2010] Osterwalder, A. and Pigneur, Y. (2010). *Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers*. Wiley.
- [Ries, 2011] Ries, E. (2011). *The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses*. Crown Business.

9.1 CS370. Big Data

- [Baluja et al., 2008] Baluja, S., Seth, R., Sivakumar, D., Jing, Y., Yagnik, J., Kumar, S., Ravichandran, D., and Aly, M. (2008). Video suggestion and discovery for youtube: Taking random walks through the view graph. In *Proceedings of the 17th International Conference on World Wide Web, WWW '08*, pages 895–904, New York, NY, USA. ACM.
- [Buyya et al., 2013] Buyya, R., Vecchiola, C., and Selvi, S. T. (2013). *Mastering Cloud Computing: Foundations and Applications Programming*. Morgan Kaufmann Publishers Inc., San Francisco, CA, USA, 1st edition.
- [Coulouris et al., 2011] Coulouris, G., Dollimore, J., Kindberg, T., and Blair, G. (2011). *Distributed Systems: Concepts and Design*. Addison-Wesley Publishing Company, USA, 5th edition.
- [Hwang et al., 2011] Hwang, K., Dongarra, J., and Fox, G. C. (2011). *Distributed and Cloud Computing: From Parallel Processing to the Internet of Things*. Morgan Kaufmann Publishers Inc., San Francisco, CA, USA, 1st edition.
- [Low et al., 2012] Low, Y., Bickson, D., Gonzalez, J., Guestrin, C., Kyrola, A., and Hellerstein, J. M. (2012). Distributed graphlab: A framework for machine learning and data mining in the cloud. *Proc. VLDB Endow.*, 5(8):716–727.
- [Malewicz et al., 2010] Malewicz, G., Austern, M. H., Bik, A. J., Dehnert, J. C., Horn, I., Leiser, N., and Czajkowski, G. (2010). Pregel: A system for large-scale graph processing. *ACM SIGMOD Record.*, pages 135–146.

9.2 CS403. Final Project II

- [Association for Computing Machinery, 2008] Association for Computing Machinery (2008). *Digital Library*. Association for Computing Machinery. <http://portal.acm.org/dl.cfm>.
- [CiteSeer.IST, 2008] CiteSeer.IST (2008). *Scientific Literature Digital Library*. College of Information Sciences and Technology, Penn State University. <http://citeseer.ist.psu.edu>.

[IEEE-Computer Society, 2008] IEEE-Computer Society (2008). *Digital Library*. IEEE-Computer Society. <http://www.computer.org/publications/dlib>.

9.3 CS351. Topics in Computer Graphics

9.4 CS362. Natural Language Processing

[M et al., 2007] M, S., V, H., and R, B. (2007). *Image Processing, Analysis and Machine Vision*. Cengage-Engineering.

[R and R, 2007] R, C, G. and R, E, W. (2007). *Digital Image Processing*. Prentice Hall.

[S et al., 2005] S, T., W, B., and D, F. (2005). *Probabilistic Robotics*. Intelligent Robots and Autonomous Agents. The MIT Press.

[Siegwart and Nourbakhsh, 2004] Siegwart, R. and Nourbakhsh, I. (2004). *Introduction to Autonomous Mobile Robots*. The MIT Press.

[Stone, 2000] Stone, P. (2000). *Layered Learning in Multiagent Systems*. Intelligent Robots and Autonomous Agents. The MIT Press.

9.5 CS363. Learning by Reinforcement

9.6 CS372. Web mining

9.7 CS373. Data Visualization

9.8 CS392. Tópicos en Ingeniería de Software

[Pressman and Maxim, 2015] Pressman, R. S. and Maxim, B. (2015). *Software Engineering: A Practitioner's Approach*. McGraw-Hill, 8th edition.

[Sommerville, 2017] Sommerville, I. (2017). *Software Engineering*. Pearson, 10th edition.

9.9 CS3T3. Bioinformatic Algorithms

9.10 CS3T4. Computational Genetics

9.11 CB309. Bioinformatics

[Aluru, 2006] Aluru, S., editor (2006). *Handbook of Computational Molecular Biology*. Computer and Information Science Series. Chapman & Hall, CRC, Boca Raton, FL.

-
- [Clote and Backofen, 2000] Clote, P. and Backofen, R. (2000). *Computational Molecular Biology: An Introduction*. John Wiley & Sons Ltd. 279 pages.
- [Durbin et al., 1998] Durbin, R., Eddy, S., Krogh, A., and Mitchison, G. (1998). *Biological Sequence Analysis: Probabilistic Models of Proteins and Nucleic Acids*. Cambridge University Press.
- [Krogh et al., 1994] Krogh, A., Brown, M., Mian, I. S., Sjölander, K., and Haussler, D. (1994). Hidden markov models in computational biology, applications to protein modeling. *J Molecular Biology*, 235:1501–1531.
- [Pevzner, 2000] Pevzner, P. A. (2000). *Computational Molecular Biology: an Algorithmic Approach*. The MIT Press, Cambridge, Massachusetts.
- [Setubal and Meidanis, 1997] Setubal, J. C. and Meidanis, J. (1997). *Introduction to computational molecular biology*. Boston: PWS Publishing Company.

9.12 ET301. Entrepreneurship II

- [Blank and Tarkin, 2006] Blank, L. and Tarkin, A. (2006). *Ingeniería Económica*. McGraw Hill, México D.F., México.
- [de Manuel Dasí and Martínez, 2006] de Manuel Dasí, F. and Martínez, R. M.-V. (2006). *Técnicas de Negociación. Un método práctico*. Esic, Madrid.
- [Fisher et al., 1996] Fisher, R., Ury, W., and Patton, B. (1996). *Si... ¡de acuerdo! Cómo negociar sin ceder*. Norma, Barcelona.
- [Kotler and Keller, 2006] Kotler, P. and Keller, K. L. (2006). *Dirección de Marketing*. Prentice Hall, México.
- [Lovelock and Wirtz, 2009] Lovelock, C. and Wirtz, J. (2009). *Marketing de servicios. Personal, tecnología y estrategia*. Prentice Hall, México.

10.1 CS365. Evolutionary Computing

10.2 CS3P2. Cloud Computing

- [Baluja et al., 2008] Baluja, S., Seth, R., Sivakumar, D., Jing, Y., Yagnik, J., Kumar, S., Ravichandran, D., and Aly, M. (2008). Video suggestion and discovery for youtube: Taking random walks through the view graph. In *Proceedings of the 17th International Conference on World Wide Web, WWW '08*, pages 895–904, New York, NY, USA. ACM.
- [Buyya et al., 2013] Buyya, R., Vecchiola, C., and Selvi, S. T. (2013). *Mastering Cloud Computing: Foundations and Applications Programming*. Morgan Kaufmann Publishers Inc., San Francisco, CA, USA, 1st edition.
- [Coulouris et al., 2011] Coulouris, G., Dollimore, J., Kindberg, T., and Blair, G. (2011). *Distributed Systems: Concepts and Design*. Addison-Wesley Publishing Company, USA, 5th edition.

-
- [Hwang et al., 2011] Hwang, K., Dongarra, J., and Fox, G. C. (2011). *Distributed and Cloud Computing: From Parallel Processing to the Internet of Things*. Morgan Kaufmann Publishers Inc., San Francisco, CA, USA, 1st edition.
- [Low et al., 2012] Low, Y., Bickson, D., Gonzalez, J., Guestrin, C., Kyrola, A., and Hellerstein, J. M. (2012). Distributed graphlab: A framework for machine learning and data mining in the cloud. *Proc. VLDB Endow.*, 5(8):716–727.
- [Malewicz et al., 2010] Malewicz, G., Austern, M. H., Bik, A. J., Dehnert, J. C., Horn, I., Leiser, N., and Czajkowski, G. (2010). Pregel: A system for large-scale graph processing. *Proc. ACM SIGMOD*, pages 135–146.

10.3 CS3P3. Internet of Things

- [Kirk and mei W. Hwu, 2013] Kirk, D. B. and mei W. Hwu, W. (2013). *Programming Massively Parallel Processors: A Hands-on Approach*. Morgan Kaufmann, 2nd edition.
- [Matloff, 2014] Matloff, N. (2014). *Programming on Parallel Machines*. University of California, Davis.
- [Pacheco, 2011] Pacheco, P. S. (2011). *An Introduction to Parallel Programming*. Morgan Kaufmann, 1st edition.
- [Quinn, 2003] Quinn, M. J. (2003). *Parallel Programming in C with MPI and OpenMP*. McGraw-Hill Education Group, 1st edition.
- [Sanders and Kandrot, 2010] Sanders, J. and Kandrot, E. (2010). *CUDA by Example: An Introduction to General-Purpose GPU Programming*. Addison-Wesley Professional, 1st edition.

10.4 CS404. Final Project III

- [Association for Computing Machinery, 2008] Association for Computing Machinery (2008). *Digital Library*. Association for Computing Machinery. <http://portal.acm.org/dl.cfm>.
- [CiteSeer.IST, 2008] CiteSeer.IST (2008). *Scientific Literature Digital Library*. College of Information Sciences and Technology, Penn State University. <http://citeseer.ist.psu.edu>.
- [IEEE-Computer Society, 2008] IEEE-Computer Society (2008). *Digital Library*. IEEE-Computer Society. <http://www.computer.org/publications/dlib>.

10.5 CS364. Cognitive Computing

10.6 CS366. Robotics

10.7 CS369. Topics in Artificial Intelligence

[Cantú-Paz, 2000] Cantú-Paz, E. (2000). *Efficient and Accurate Parallel Genetic Algorithms*. Kluwer Academic Publishers, Norwell, MA, USA.

[Coello, 2007] Coello, C. A. C. (2007). *Evolutionary Algorithms for Solving Multi-Objective Problems (Genetic and Evolutionary Computation)*. Springer, 2nd edition edition.

[da Cruz, 2007] da Cruz, A. A. (2007). *Algoritmos Evolutivos com Inspiração Quântica para Problemas com Representação Numérica*. PhD thesis, Departamento de Engenharia Elétrica, Pontifícia Universidade Católica do Rio de Janeiro, Rio de Janeiro, Brasil. (In Portuguese).

[da Cruz, 2003] da Cruz, A. V. A. (2003). Otimização de planejamento com restrições de precedência usando algoritmos genéticos e co-evolução cooperativa. Master's thesis, Departamento de Engenharia Elétrica, Pontifícia Universidade Católica do Rio de Janeiro.

[El-Mihoub et al., 2006] El-Mihoub, T. A., Hopgood, A. A., Nolle, L., and Battersby, A. (2006). Hybrid genetic algorithms: A review. *Engineering Letters*, 13(2).

[Fogel, 1995] Fogel, D. B. (1995). *Evolutionary Computation. Toward a New Philosophy of Machine Intelligence*. The Institute of Electrical and Electronic Engineers, New York.

[Goldberg, 1989] Goldberg, D. E. (1989). *Genetic Algorithms in Search, Optimization and Machine Learning*. Addison-Wesley Publishing Co., Reading, Massachusetts.

[Holland, 1975] Holland, J. H. (1975). *Adaptation in Natural and Artificial Systems*. University of Michigan Press, Ann Arbor, Michigan, first edition.

[Koza, 1992] Koza, J. R. (1992). *Genetic Programming. On the Programming of Computers by Means of Natural Selection*. The MIT Press, Cambridge, Massachusetts.

[Michalewicz, 1996] Michalewicz, Z. (1996). *Genetic Algorithms + Data Structures = Evolution Programs*. Springer-Verlag.

[Michalewicz, 2000] Michalewicz, Z. (2000). Introduction to constraint-handling techniques, decoders, repair algorithms, constraint-preserving operators. *Evolutionary Computation 2, Advanced Algorithms and Operators*, pages 38–40,49–55,56–61,62–68.

[Mitchell, 2004] Mitchell, M. (2004). *An Introduction to Genetic Algorithms: Complex Adaptive Systems*. The MIT Press.

-
- [Reynolds, 1994] Reynolds, R. G. (1994). An Introduction to Cultural Algorithms. In Sebald, A. V., , and Fogel, L. J., editors, *Proceedings of the Third Annual Conference on Evolutionary Programming*, pages 131–139. World Scientific, River Edge, New Jersey.
- [Rozenberg et al., 2012] Rozenberg, G., Bäck, T., and Kok, J. N., editors (2012). *Handbook of Natural Computing*. Springer Publishing Company, Incorporated, 1st edition.
- [Smith and Coit, 2000] Smith, A. E. and Coit, D. W. (2000). Penalty functions. *Evolutionary Computation 2, Advanced Algorithms and Operators*, pages 41–48.
- [Storn and Price, 1995] Storn, R. and Price, K. (1995). Differential Evolution: A Simple and Efficient Adaptive Scheme for Global Optimization over Continuous Spaces. Technical Report TR-95-012, International Computer Science Institute, Berkeley, California.
- [Weise, 2009] Weise, T. (2009). Global optimization algorithms - theory and application. <http://www.it-weise.de>.

10.8 CS374. Text Processing for Data Science

10.9 CS379. Tópicos Avanzados en Ciencia de Datos

10.10 CS3T5. Modeling and Simulation of Biological Systems

10.11 CS3T9. Advanced Topics in Bioinformatics

10.12 FG211. Professional Ethics

- [Argandoña, 2006] Argandoña (2006). La identidad cristiana del directivo de empresa. *IESE*.
- [for Computing Machinery (ACM), 1992] for Computing Machinery (ACM), A. (1992). Acm code of ethics and professional conduct.
- [Hernández, 2006] Hernández, A. (2006). *Ética Actual y Profesional. Lecturas para la Convivencia Global en el Siglo XXI*. Ed. Thomson.
- [IEEE, 2004] IEEE (2004). Ieee code of ethics. *IEE*.
- [Loza, 2000] Loza, C. (2000). El aporte de la doctrina social de la iglesia a la toma de decisiones empresariales. *Separata ofrecida por el profesor*.

- [Manzone, 2007] Manzone, G. (2007). *La Responsabilidad de la Empresa, Business Ethics y Doctrina Social de la Iglesia en Diálogo*. Universidad Católica San Pablo.
- [Nieburh, 2003] Nieburh, R. (2003). *El Yo Responsable. Ensayo de Filosofía Moral Cristiana*. Bilbao.
- [para las Comunicaciones Sociales, 2002] para las Comunicaciones Sociales, P. C. (2002). *Ética en Internet*.
- [Pérez López, 1998] Pérez López, J. A. (1998). *Liderazgo y Ética en la Dirección de Empresas*. Bilbao.
- [Schmidt, 1995] Schmidt, E. (1995). *Ética y Negocios para América Latina*. Universidad del Pacífico.

10.13 ET302. Entrepreneurship III

- [Project Management Institute, 2012] Project Management Institute, P. (2012). *PMBOK Guide, 5th Edition*. Project Management Institute.
- [Rita Mulcahy, 2009] Rita Mulcahy, P. (2009). *PMP Exam Prep - 6th Edition*. RMC Publications.