Jaime J. Dávila

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EDUCATION

1991-1999 **Ph.D in Computer Science**
Graduate School and University Center, CUNY, New York, New York

1983- 1988 **Bachelor of Science in Computer Engineering**
University of Puerto Rico, Mayagüez Campus, Mayagüez, P.R.

WORK EXPERIENCE

Fall 2019- Present **Senior Lecturer II**
University of Massachusetts - Amherst

1999- present **Associate Professor of Computer Science**
Hampshire College, School of Cognitive Science, Amherst, MA
(on leave fall 2019-Spring 2023)

2007-2012 **Special Presidential Assistant for Diversity and Multicultural Education**
Hampshire College, Amherst MA

Spring 2007 **Acting Associate Dean of Multicultural Education**
Hampshire College, Amherst MA.

Summer 2001 **Visiting Instructor**
Brandeis University School of Continuing Studies, Waltham , MA
· Teaching two graduate sections of a course in Perl Programming, both at the Brandeis campus and at an EMC site.

Sept 1997- May 1998 **Substitute Instructor**
City College of New York, Department of Computer Science, New York , NY
· Teaching courses in programming languages and data structure

Sept 1993- May 1997 **Graduate Fellow**
Graduate School and University Center , CUNY, New York, NY
· Performing installation, maintenance, and training of a Unix-based research computer laboratory.

1988-1991 **Process Support Engineer**
Abbott Chemicals Inc., Barceloneta, P.R.
· Designing, implementing, testing, giving maintenance, and training personnel in the use of computerized production lines.

SELECTED COMMITTEE WORK

Fall 2021- Present **Member, Campus IT Program Steering Committee**
Providing guidance to director of the IT Program

Fall 2021- Present **Chair, Teaching Development Committee**
Developing college programming oriented towards improving overall faculty teaching capabilities.

Summer 2021 **Member, Opportunity Hire Search Committee.**
Met through the summer to prepare and carry out interview process, evaluate application materials, and prepare a recommendation to be presented to the CICS faculty.

AY 2021 **Member, ad hoc Committee studying and redesigning CICS introductory course sequence.**

AY 2021 **Core member, Committee Against Racism and for Equity.**
Met during the Summer and fall of 2020 to to build a long-term Inclusion and Antiracism Action Plan for CICS.

AY 2020   **CICS Ah Hoc Committee on the Undergraduate Curriculum.**
Compiling information about computer science programs at institutions across the United States, and comparing their course sequence and curricula to ours. Committee met approximately every other week during the fall semester.

AY 2020   **CICS Diversity Committee.**
Advising the Director for Diversity and Inclusion on programmatic issues.

GRANTS

December 1 2021-Present   **National Science Foundation Grant 2130070**
Co-PI, Boosting Access to Data Science Scholars
Designing and implementing programs to enhance Computer Science education programs for members of economically disadvantaged populations.

Fall 2019-Present   **National Science Foundation Grant 1923765**
Co-PI, HDR DSC: Collaborative Research: The Data Science WAV: Experiential Learning with Local Community Organizations. Providing undergraduate student with hands-on data science experiences within local community organizations.

2011-2016   **National Science Foundation Grant 0966086: Attracting and Retaining Promising Transfer Students into STEM Fields**
Principal Investigator and manager for 5-year $441550 project supporting underrepresented community college transfer students in the sciences.

REVIEWING AND OUTSIDE COMMITTEE WORK

AY 2022   **Reviewer, SIGSCE 2022 Technical Symposium on Computer Science Education**
Position and Curricula Initiatives papers

AY 2022   **Reviewer, SIGSCE 2022 Technical Symposium on Computer Science Education**
Nifty Assignment papers

AY 2022   **Reviewer, 2022 Consortium for Computing Sciences in Colleges**
Northeastern Region

Fall 2021   **Judge, Hack(her) 413 Hackathon**
UMass Amherst

Spring 2021   **Judge, Hack UMass Hackathon**
UMass Amherst

Winter 2020   **NSF IUSE Grant Proposal Review Panel**
Reviewing and evaluating proposals submitted to the Improving Undergraduate STEM Education: Education and Human Resources Division of the National Science Foundation

Spring 2019   **NSF S-STEM Grant Proposal Review Panel**
Reviewing and evaluating proposals submitted to the Division of Undergraduate Education of the National Science Foundation

Summer 2018   **NSF S-STEM Grant Proposal Review Panel**
Reviewing and evaluating proposals submitted to the Division of Undergraduate Education of the National Science Foundation

Summer 2017   **NSF S-STEM Grant Proposal Review Panel**
Reviewing and evaluating proposals submitted to the Division of Undergraduate Education of the National Science Foundation

Summer 2017   **External Evaluator, Faculty Reappointment and Promotion Process**
For Goucher College

Spring 2017   **NSF S-STEM Grant Proposal Review Panel**
Reviewing and evaluating proposals submitted to the Division of Undergraduate Education of the National Science Foundation

Fall 2016   **External Evaluator, Faculty Reappointment and Promotion Process**
For University of South Carolina Beaufort and Adelphi University

Summer 2016   **NSF S-STEM Grant Proposal Review Panel**
Reviewing and evaluating proposals submitted to the Division of Undergraduate Education of the National Science Foundation

Fall 2014   **NSF S-STEM Grant Proposal Review Panel**
Reviewing and evaluating proposals submitted to the Division of Undergraduate Education of the National Science Foundation

November 2014-present	**Member, Hitchcock Center for the Environment Board of Trustress**
Fall 2013	**NSF S-STEM Grant Proposal Review Panel** Reviewing and evaluating proposals submitted to the Division of Undergraduate Education of the National Science Foundation
Spring 2013	***Control & Cybernetics*** Peer review of Article Submission
Fall 2012	***Journal of Diversity in Higher Education*** Peer review of article submission.
Summer 2006	**Intelligent System Design and Applications** Peer review of papers for Artificial Intelligence Conference.
Spring 2006	**CCSCE 2006** Peer review of papers for the Annual Meeting of the Consortium for Computer Science in Colleges, Eastern Conference.
September 2005	**National Science Foundation Panel** Reviewing Grant Proposals to the Information and Intelligent Systems Text Program.
July 2005	**National Science Foundation Panel** Reviewing Grant Proposals to the Information and Intelligent Systems Advance Learning Technologies Program.
April 2005	***BioSystems* Journal.** Peer Review of Paper.
2003	***The Internet Encyclopedia.*** Peer review of two chapter submissions.

PEDAGOGICAL WORKSHOPS

AY 2013-2014	**Participant, Teaching Circle on Managing Difficult Classroom Conversations** Organized by Hampshire College's Center for Teaching and Learning
AY 2012	**Co-organizer, Five Colleges Faculty Seminar on Dialogic Practices in the Classroom** Organizing and facilitating faculty conversations on ways to incorporate dialogic techniques into classroom practices.
2012	**Organizer, LADO Meeting** Organized and hosted the Fall 2012 Meeting of the Liberal Arts Diversity Officers (LADO)
2009,2010	**Co-Organizer, Summer Intergroup Dialogue Training Institute** Organizing three-day-long institute that trained 120 college employees on facilitating dialogues on race and ethnicity, spirituality, gender, and rank and class.
2008	**Trainee, Qualifying Seminar for Administration and interpretation of Intercultural Development Inventory** Intercultural Communication Institute, Minneapolis, MN
2002	**STEMTEC Fellow** NSF funded project investigating the scholarship and practice of teaching.
2002	**Participant, Case Studies in Science Summer Workshop** Investigating Ways to Design and Deploy Student-centered Courses.
2001, 2002	**Participant, SENCER Summer Institute** NSF funded institute on science education for new civic engagements and responsibilities.

PEER-REVIEWED PUBLICATIONS

From Orthography to Semantics: a Study of Morphological Processing through Deep Learning Neural Networks
In the Proceedings of the 2018 World Congress on Computational Intelligence

From Orthography to Semantics: a Study of Morphological Processing through Deep Learning Neural Networks
In the Proceedings of the 2018 World Congress on Computational Intelligence

An Empirical Comparison of Genetically Evolved Programs and Evolved Neural Networks for Multi-agent Systems Operating under Dynamic Environments
2015 Genetic and Evolutionary Computation Conference (GECCO) Companion Volume

On the Effect of Genetic Coding and Diversity of Evolutionary Neural Networks under Changing Environmental Conditions
2014 World Congress on Computational Intelligence
Evolution of NN for the Design of Virtual Agents under Limited Resources Constraints
Proceedings of the 2007 International Joint Conference on Neural Networks.
The Digital Divide
Chapter in The *Handbook of Information Security,* published by John Wiley & Sons, 2005.
The Digital Divide
Chapter in *The Internet Encyclopedia,* published by John Wiley & Sons, 2004.
Evolution of Hierarchical Neural Networks for Time-dependent Cognitive Processes: Key Recognition for Musical Compositions
Proceeding of the 2003 Congress on Evolutionary Computation.
Disruption Analysis for Neural Network Topology Evolution Systems
Proceedings of the International Conference on Neural Information Processing, 2002.
Genetic evolution of neural networks that remember
Proceedings of the Joint International Conference on Neural Networks, 2002.
Genetic Algorithms and the Evolution of Neural Networks for Language Processing
CELE-Twente Workshop on Language Technology, 2000.
A New Metric for Evaluating Genetic Optimization of Neural Networks.
Proceedings of the First IEEE Symposium on Combinations of Evolutionary Computation and Neural Networks, 2000.
Exploring the Relationship Between Neural Network Topology and Optimal Training Set by Means of Genetic Algorithms.
Proceedings of the International Conference on Neural Networks and Genetic Algorithms, 1999
Genetic Optimization of NN Topologies for the Task of Natural Language Processing.
International Joint Conference on Neural Networks, 1999

PRESENTATIONS

2015 **Genotype Coding, Diversity, and Dynamic Evolutionary Neural Network Environments: A Study on an Multi-agent System**
Genetic and Evolutionary Computation (GECCO) Hot off the Press Presentations
2012 **Intergroup Dialogues and Inclusive Campus Climates: A Model for Faculty and Staff Development**
Presented at the 2012 National Conference on Race and Ethnicity in Higher Education (NCORE**)**
2012 **Collaborating for Change through Action and Research: Lessons Learned during the Five College IGD Initiative**
Presented at the Social Justice in Education Forum, UMass Amherst
2000 **Genetic Evolution of Sensors and Topology for a Neurally Controlled Robot.**
Workshop Proceedings of the Genetic and Evolutionary Computation Conference (GECCO-2000)
2000 **Why do we need to close the digital divide?**
Presented at the 2000 Annual meeting of the Puerto Rican Studies Association.
1998 **Optimizing initial neural network configurations for the task of natural language processing.**
Presented at the 1998 AAAI/SIGART Doctoral Consortium, Madison Wisconsin. Also presented as a poster at the AAAI Fifteenth National Conference on Artificial Intelligence.
1998 ***Neural network pruning and topology for natural language processing.***
Presented as a poster at the 11th Annual CUNY Conference on Human Sentence Processing, 1998.

AWARDS

1998-1999 **Five Colleges/Mendenhall Fellowship**
Awarded to minority doctoral candidates in the final stage of completing their degrees.
Stanton Heiskell Center Fellow
1994-1998 Researching ways in which technology can be used to enhance education of at-risk high school students.

1996	**Belle Zeller Fellow**
	Annual recognition of student involvement in community service.

VOLUNTEER ACTIVITIES

September 2017-Present	**Member of Executive Committee, Hitchcock Center for the Environment Board of Trustees**
November 2014-Present	**Member, Hitchcock Center for the Environment Board of Trustress**
2008-2009	**Board of Trustees, The Common School** An Innovative, Child-Centered School for Children Ages 3-12 Amherst, MA
2000-2005	**Board Member, Latino Scholarship Association** Providing college scholarships to deserving students of color in the Pioneer Valley.
1995-1998	**Student Member, Computer Science Department Executive Committee, Graduate School and University Center, CUNY.**
1995-1997	**DSC (Doctoral Student Council) member** The DSC is the student Government Body of CUNY's Graduate Center.
1995-1996	**Board Member, Center for Puerto Rican Studies Community Advisory Board, Hunter College, CUNY.**
1995	**Boston → New York AIDS ride** Raising funds to support AIDS community groups serving New York City.
1993-1995	**Coordinator, AELLA (Association of Latino and Latin American Student)**
1994-1995	**Member, Strategic Planning Committee, Graduate School and University Center** This committee was assembled by the President of the Graduate Center, and had a its mandate to make recommendations that would guide all decision-making processes at the Graduate Center.

REFERENCES

Available upon request