Andres Mauricio Bejarano Posada

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Department of Computer Science, Purdue University, West Lafayette, IN 47907, USA Office: DSAI 1139A, +1-765-494-5351 Updated: May 2, 2025

EDUCATION

Doctor of Philosophy

August 2014 - May 2020

Purdue University, Department of Computer Science

West Lafayette, IN, USA

- Dissertation: Generation of Topological Interlocking Configurations from a Geometric Approach
- Advisor: Dr. Christoph Hoffmann

Master of Science

August 2014 - May 2017

Purdue University, Department of Computer Science

West Lafayette, IN, USA

Master's in Systems Engineering and Computation

February 2009 - November 2012

Universidad del Norte, Department of Systems Engineering and Computation

Barranquilla, Colombia

• Thesis: NORIA: Node Reservation Intelligent Agent

Advisor: Dr. Jose Marquez

• Bacherlor's in Systems Engineering

January 2004 - March 2009

Universidad del Norte, Department of Systems Engineering and Computation

Barranquilla, Colombia

• Final Project: Detection of Source Code Plagiarism in Programming Courses

Advisor: Dr. Lucy Garcia

PROFESSIONAL APPOINTMENTS

Assistant Teaching Professor (formerly Assistant Professor of Practice)

August 2022 - Present

Purdue University, Department of Computer Science

West Lafayette, IN, USA

- Coordinate teams of 40+ reports, including Graduate Teaching Assistants (TAs) and Undergraduate TAs per semester.
- Supervise software development, testing, and QA teams to create assessment activities.
- Mentor and supervise graduate and undergraduate research assistants in Computer Science Education,
 Theoretical Computer Science, Artificial Intelligence, and Geometry Processing.
- Develop and deliver core Computer Science, Data Science, and Artificial Intelligence courses.
- Conduct scholarship of teaching and learning projects.
- Collaborate with instructional specialists in managing course staff and assessment delivery.

Visiting Assistant Professor

May 2020 - August 2022

West Lafayette, IN, USA

Purdue University, Department of Computer Science

- Coordinated teams of 20+ reports, including Graduate TAs and Undergraduate TAs per semester.
- Supervised software development, testing, and QA teams to create assessment activities.
- Mentored and supervised undergraduate research assistants in Artificial Intelligence and Geometry Processing.
- Delivered core Computer Science and Data Science courses.
- Collaborated with instructional specialists in managing course staff and assessment delivery.

Graduate Research Associate

May 2016 - May 2020

West Lafayette, IN, USA

Purdue University, Rosen Center for Advanced Computing

- Designed and proposed system architectures to support the curation, archiving, preservation, dissemination, and experiment replicability for multi-disciplinary research datasets.
- Contributed to the codebase of interfaces compatible with HubZero.

• Software Engineer Intern

NVIDIA Co., DirectX Driver Development Team

May 2018 - August 2018 Durham, NC, USA

• Improved the internal APIC minimizer debugging tool by including automatic resource and draw call identification in an APIC trace for rendering on a region of interest in a frame.

• Graduate Teaching Assistant

August 2014 - May 2016

Purdue University, Department of Computer Science

West Lafayette, IN, USA

- Assisted instructors with delivering material and assessment activities for undergraduate courses.
- Designed and developed software for assessment activities.
- Provided discussions and review sessions to clarify concepts on algorithms, data structures, and computer graphics.
- Designed course evaluation activities.

• Research Assistant

March 2014 - March 2015

Universidad del Norte, GRECIS Research Group

Barranquilla, Colombia

- Explored the applications and trends of smart home environments from research publications and existing commercial solutions.
- Proposed the architecture of a low-cost smart home system based on embedded hardware.

Adjunct Professor

July 2010 - June 2014

Universidad del Norte, Department of Systems Engineering and Computation

Barranquilla, Colombia

- Instructed on Algorithms and Programming, Fundamentals of Computer Graphics, Mobile App Development, and Multimedia for Communications.
- Advised 6 senior final project groups (10 students in total).

Software Engineer

September 2011 - November 2011

Universidad del Norte, Information Technology and Communications Office

Barranquilla, Colombia

- Designed and developed web platforms to manage user-access privileges to selected systems and internal databases.
- Managed the university's online radio station server and antispam services.

Research Assistant

February 2009 - December 2009

Universidad del Norte, TRANVIA Research Group

Barranquilla, Colombia

- Supported the survey data collection activities by curating and managing the collected data.
- Led survey activities for international air traveler data collection.

CONFERENCE AND JOURNAL PUBLICATIONS

C=Conference, J=Journal, U=Under Review

- [C] E. Dickey and **A. Bejarano**, "GAIDE: A Framework for Using Generative AI to Assist in Course Content Development", 2024 IEEE Frontiers in Education Conference (FIE), Washington, DC, USA, 2024, pp. 1-9, doi: 10.1109/FIE61694.2024.10893132
- [C] A. Sinha, S. Goyal, Z. Sy, R. Kuperus, E. Dickey and **A. Bejarano**, "BoilerTAI: A Platform for Enhancing Instruction Using Generative AI in Educational Forums", 2024 IEEE Frontiers in Education Conference (FIE), Washington, DC, USA, 2024, pp. 1-8, doi: 10.1109/FIE61694.2024.10893137
- [J] Bejarano A., Moran K. "Multistep Evolution Method to Generate Topological Interlocking Assemblies." Applied Sciences 2024, 14(15):6542. https://doi.org/10.3390/app14156542
- [J] Dickey, E., **Bejarano**, **A.**, Garg, C. "AI-Lab: A Framework for Introducing Generative Artificial Intelligence Tools in Computer Programming Courses." SN COMPUT. SCI. 5, 720 (2024). https://doi.org/10.1007/s42979-024-03074-y
- [J] Hewa Nadungodage, C., Catlin, A. C., **Bejarano, A.**, Clark, S., Wickramaarachchi, G., Fernando, S., Desigavinayagam, P. "The DEEDS platform: Support for integrated data and computing across the research lifecycle." Future Generation Computer Systems (2020). https://doi.org/10.1016/j.future.2019.10.031
- [C] Bejarano, A., Hoffmann, C. "TIGER: Topological Interlocking GEneratoR." In 2020 IEEE Games, Multimedia, Animation and Multiple Realities Conference (GMAX), September 17-18, 2020, Universidad del Norte, Barranquilla, Colombia. https://doi.org/10.1109/GMAX49668.2020.9256836
- [J] Bejarano, A., Hewa Nadungodage, C., Wang, F., Catlin, A. C., Hoag, S. W. "Decision Support for Excipient Risk Assessment in Pharmaceutical Manufacturing." AAPS PharmSciTech, 20(6), 223. (2019). https://doi.org/10.1208/s12249-019-1440-x

- [J] Bejarano, A., Hoffmann, C. "A Generalized Framework for Designing Topological Interlocking Configurations." International Journal of Architectural Computing, 17(1), 53–73. (2019). https://doi.org/10.1177/1478077119827187
- [J] Catlin, A. C., Hewa Nadungodage, C., **Bejarano**, A. "Lifecycle Support for Scientific Investigations: Integrating Data, Computing, and Workflows." Computing in Science & Engineering, 21(4), 49–61. (2019). https://doi.org/10.1109/MCSE.2019.2901433
- [C] Catlin, A. C., Hewa Nadungodage, C., Clark, S., Fernando, S., Wickramaarachchi, G., **Bejarano, A.**, Patil, O. "Fully Integrating Data with Compute Workflows: A Platform to Better Serve Scientific Research." Gateways 2018: The 13th Gateway Computing Environments Conference. Presented at the University of Texas at Austin. (2018). https://doi.org/10.6084/m9.figshare.7038758.v2
- [C] Bejarano, A., Hoffmann, C. "Topological Interlocking Cylinder Configurations: A Geometric Approach." In T. Siegmund & F. Barthelat (Eds.) Proceedings of the IUTAM Symposium Architectured Materials Mechanics, September 17-19, 2018, Chicago, IL: Purdue University Libraries Scholarly Publishing Services, 2018. https://docs.lib.purdue.edu/iutam/presentations/abstracts/9
- [J] Catlin, A. C., Hewa Nadungodage, C., Laughery, L., Sim, C., Puranam, A., **Bejarano**, **A.** "A Cyberplatform for Sharing Scientific Research Data at DataCenterHub." Computing in Science & Engineering, 20(3), 49–70. (2018). https://doi.org/10.1109/MCSE.2017.3301213
- [J] Bejarano, A., Jindal, A., Bhargava, B. "Measuring User's Influence in the Yelp Recommender System." PSU Research Review, 1(2), 91–104. (2017). https://doi.org/10.1108/PRR-02-2017-0016
- [J] Bejarano, A., Fernandez, A., Jimeno, M., Salazar, A., Wightman, P. "Towards the Evolution of Smart Home Environments: A Survey." International Journal of Automation and Smart Technology, 6(3), 105–136. (2016). http://dx.doi.org/10.5875/ausmt.v6i3.1039
- [C] Bejarano, A., Morales, G. "Solving real problems supported by corporative IT tools: A New Strategy of Professional Experience from the Classroom." World Engineering Education Forum WEEF 2013, Cartagena, Colombia. https://acofipapers.org/index.php/acofipapers/2013/paper/viewFile/314/166
- [C] Bejarano, A., Morales, G., Rodriguez, M., Wightman, P. "Strategies for Professional Skill Development through the Strengthening of Student Groups: A Case of Study." World Engineering Education Forum WEEF 2013, Cartagena, Colombia. https://acofipapers.org/index.php/acofipapers/2013/paper/viewFile/313/165
- [J] Bejarano, A., Garcia, L., Zurek, E. "Detection of Source Code Similitude in Academic Environments." Computer Applications in Engineering Education, 23(1), 13–22. (2013). https://doi.org/10.1002/cae.21571

PREPRINTS A=ARXIV

- [A] Dickey, E., **Bejarano**, **A.**, Kuperus, R., Fagundes, B. (2025), "Evaluating the AI-Lab Intervention: Impact on Student Perception and Use of Generative AI in Early Undergraduate Computer Science Courses." https://arxiv.org/abs/2505.00100
- [A] Sinha, A., Goyal, S., Sy, Z., Kuperus, R., Dickey, E., **Bejarano**, A. (2024), "BoilerTAI: A Platform for Enhancing Instruction Using Generative AI in Educational Forums." https://arxiv.org/abs/2409.13196
- [A] Dickey, E., **Bejarano**, A., Garg, C. (2023). "Innovating Computer Programming Pedagogy: The AI-LAB Framework for Generative AI Adoption." https://arxiv.org/abs/2308.12258
- [A] Dickey, E., **Bejarano**, A. (2023). "A Model for Integrating Generative AI into Course Content Development." https://arxiv.org/abs/2308.12276

CONFERENCE PRESENTATIONS, POSTERS, AND SELECTED TALKS C=CONFERENCE, P=POSTER, T=TALK

- [P] Andres Bejarano, Ethan Dickey, and Rhianna Setsma. "Implementing the AI-Lab Framework: Enhancing Introductory Programming Education for CS Majors." In Proceedings of the 56th ACM Technical Symposium on Computer Science Education V. 2 (SIGCSE TS 2025). Association for Computing Machinery, New York, NY, USA, 1383–1384. https://doi.org/10.1145/3641555.3705201
- [C] Dickey, E., **Bejarano**, **A.** "GAIDE: A Framework for Using Generative AI to Assist in Course Content Development." 2024 IEEE Frontiers in Education Conference (FIE), October 13-16, 2024, Washington D.C.
- [C] Sinha, A., Goyal, S., Will, Z., Kuperus, R., Dickey, E., **Bejarano**, **A.** "BoilerTAI: A Platform for Enhancing Instruction Using Generative AI in Educational Forums." 2024 IEEE Frontiers in Education Conference (FIE), October 13-16, 2024, Washington D.C.
- [T] Bejarano, A. "Reflecting on Teaching and Scholarship After a Student Says Thank You". In Colloquium of the Department of Computer Science, February 2, 2022, Purdue University.
- [C] Bejarano, A., Hoffmann, C., "TIGER: Topological Interlocking GEneratoR". In IEEE GMAX 2020, September 17-18, 2020, Universidad del Norte, Barranquilla, Colombia.

- [T] Wightman, P., Salazar, A., **Bejarano, A.** "IEEE 2020 Technology Trends." In Department of Systems Engineering and Computation, May 13, 2020. Universidad del Norte.
- [T] Bejarano, A., "Generation of Topological Interlocking Configurations from a Geometric Approach." In CGVLAB Lunch Talk, April 15, 2020, Purdue University.
- [T] Bejarano, A., "Equilibrium of Compression-Only Structures Made of Convex Polyhedra." In CGVLAB Lunch Talk, September 11, 2019, Purdue University.
- [T] Bejarano, A., "Dealing with Shape, Simulation, and Equilibrium of Convex Interlocking Assemblies." In CGVLAB Lunch Talk, February 5, 2019, Purdue University.
- [P] Bejarano, A., Hoffmann, C., "Topological Interlocking Cylinder Configurations: A Geometric Approach." In IUTAM 2018 Symposium of Architectured Materials Mechanics. August 2018, Chicago, IL.
- [T] Bejarano, A., "Topological Interlocking Cylinder Configurations: A Geometric Approach." In CGVLAB Lunch Talk, September 18, 2018, Purdue University.
- [T] Bejarano, A., "Convex Interlocking Generation Based on Polyhedron Midsection Evolution." In CGVLAB Lunch Talk, April 17, 2018, Purdue University.
- [T] Bejarano, A., "Challenges on the Construction of Topological Interlocking Configurations on Solids and Meshes." In CGVLAB Lunch Talk, September 19, 2017, Purdue University.
- [T] Bejarano, A., "Topological Interlocking: Life Beyond the Plane." In CGVLAB Lunch Talk, February 8, 2017, Purdue University.
- [T] Bejarano, A., "A Glimpse of Topological Interlocking Configurations." In CGVLAB Lunch Talk, September 21, 2016, Purdue University.
- [T] Bejarano, A., "Assemblable Interlocking Polyominoes." In CGVLAB Lunch Talk, April 13, 2016, Purdue University.
- [C] Bejarano, A., Morales, G. "Solving real problems supported by corporative IT tools: A new strategy of professional experience from the classroom." In Teaching Innovation International Forum, Innova CESAL Network, October 8-10, 2013, Bogota, Colombia.
- [C] Bejarano, A. "Experiences, Results, and Expectations from the Systems Engineering Computer Graphics Student Group at Uninorte." In Bogota SIGGRAPH 2013. Bogota, Colombia.
- [P] Bejarano, A., Morales, G. "Solving real problems supported by corporative IT tools: A new strategy of professional experience from the classroom." In World Engineering Education Forum WEEF 2013, September 25-26, 2013, Cartagena, Colombia.
- [C] Bejarano, A., Morales, G., Rodríguez, M., Wightman, P. "Strategies for Professional Skill Development Through the Strengthening of Student Groups: A Case of Study." In World Engineering Education Forum WEEF 2013, September 25-26, 2013, Cartagena, Colombia.
- [P] Bejarano, A., Gomez, A., Guzman, L., Habib, S., Londono, O., Rondon, A. "Implementation of a Basic Flight Simulator Controlled by Computational Vision." In Bogota SIGGRAPH 2012. Bogota, Colombia.

RESEARCH PROJECTS

• Development of Core Skills and Teaching Practices in the Presence of AI

June 2023 - Present

Purdue University, Department of Computer Science

West Lafayette, IN, USA

- Role: Co-Principal Investigator
- o Co-PI: Ethan Dickey, Ph.D. student in Computer Science
- Funding Agency: Innovation Hub Purdue University
- Description: Research project aimed to leverage generative AI (GenAI) in first- and second-year computer
 programming courses to enhance student learning, assist instructors in content creation, and reduce the workload
 of instructional staff.
- Researchers:
 - * Peter Kurto (Undergraduate, Spring 2025)
 - * Erin Kramer (Undergraduate, Spring 2025)
 - * Juliana Nieto (Undergraduate GoBoiler Program (UNAL, Colombia), Fall 2024 to January 2025)
 - * Libra Vento (Undergraduate GoBoiler Program (UTEC, Peru), Fall 2024 to January 2025)
 - * Anvit Sinha (Undergraduate, Spring 2024 to Spring 2025)
 - * Vivan Tiwari (Undergraduate, Summer 2024 to Spring 2025)
 - * Shruti Goyal (Undergraduate, Fall 2023 to Spring 2024)
 - * Zachary Sy (Undergraduate, Fall 2023 to Spring 2024)
 - * Chirayu Garg (Graduate, Summer 2023)

- Shruti Goyal, Zachary Sy, and Anvit Sinha presented results at Purdue's Spring Undergraduate Research Conference 2024.
- Results published in Springer Nature Computer Science, IEEE Frontiers in Education 2024 conference, and ACM SIGCSE 2025 Technical Symposium.
- Chirayu Garg is a co-author of AI-Lab: A Framework for Introducing Generative Artificial Intelligence Tools in Computer Programming Courses. Shruti Goyal, Zachary Sy, and Anvit Sinha are co-authors of BoilerTAI: A Platform for Enhancing Instruction Using Generative AI in Educational Forums.

• Automatic Source Code Plagiarism Detection

January 2023 - Present

Purdue University, Department of Computer Science

West Lafayette, IN, USA

- Role: Principal Investigator
- Description: Developing computational and AI-based systems for detecting plagiarism in source code submissions.
 This project aims to uphold academic integrity in computer programming courses by automating the detection of copied or closely similar code.
- Researchers:
 - * Jack Hogan (Undergraduate, Spring 2023 to Present)
 - * Micah Robinson (Undergraduate, Spring 2024 to Fall 2024)
 - * Vinh Tran (Undergraduate, Spring 2024)
 - * Ava Lyall (Undergraduate, Spring 2023 to Spring 2024)
 - * Vidit Patel (Undergraduate, Spring 2023 to Spring 2024)
 - * Ankush Maheshwari (Undergraduate, Spring 2023)

• Automatic Analysis of Algorithm Runtime

January 2023 - Spring 2024 West Lafayette, IN, USA

Purdue University, Department of Computer Science

• Role: Principal Investigator

- Description: Investigating the use of AI to analyze and evaluate algorithms automatically. This research seeks to
 provide educators and students with insights into algorithm performance and optimization, enhancing learning
 and experimentation in data structures and algorithm design.
- Researchers:
 - * Aanya Jha (Undergraduate, Fall 2023 to Spring 2024)
 - * Tzung-Ying (Denis) Hsieh (Undergraduate, Fall 2023 to Spring 2024)
 - * Nilisha Bhandari (Undergraduate, Fall 2023 to Spring 2024)
 - * Benson Tsai (Undergraduate, Fall 2023 to Spring 2024)
 - * Jiarui Xie (Spring 2023 to Spring 2024)
 - * Shubhaang Agarwal (Spring 2023 to Spring 2024)
- They presented their work titled "Tool for Runtime Analysis and Complexity Evaluator (TRACE)", at the Purdue Spring Undergraduate Research Conference 2024. They were awarded 3rd place in the College of Science Research Talks category.

• Shape Modeling with Differential Growth and GenAI

June 2023 - July 2024

Purdue University, Department of Computer Science

West Lafayette, IN, USA

- Role: Principal Investigator
- Description: Developing methods for creating organic, non-linear interlocking structures using generative AI. This
 project applies AI in architectural and structural design, focusing on sustainable, efficient, and aesthetically
 appealing building solutions.
- · Researchers:
 - * Kathryn Moran (Undergraduate, Fall 2023 to Summer 2024)
 - * Alvin Ismael (Undergraduate, Summer 2023 to Fall 2023)
 - * Ben Lilly (Undergraduate, Spring 2024)
 - * Brayden Bracket (Undergraduate, Fall 2024)
 - * Jinug Lee (Undergraduate, Summer 2023 to Fall 2023)
 - * Rachel Ibey (Undergraduate, Summer 2023 to Fall 2023)
- Results published in Applied Sciences journal.
- Kathryn Moran is co-author of Multistep Evolution Method to Generate Topological Interlocking Assemblies.

Usage of Private GenAI Tools for Course Logistics

August 2023 - December 2023

Purdue University, Department of Computer Science

West Lafayette, IN, USA

- Role: Principal Investigator
- Description: Exploring AI-driven teaching assistants to provide personalized support and guidance to students in academic settings. This initiative aims to leverage AI to tailor the educational experience to individual student needs and learning styles.

- Researchers:
 - * Anvit Sinha (Undergraduate, Fall 2023)
 - * Arunima Chowdhuri (Undergraduate, Fall 2023)
 - * Siwen Hu (Undergraduate, Fall 2023)
 - * Yashwi Thakkar (Undergraduate, Fall 2023)

• Generation of Topological Interlocking Configurations from a Geometric Approach

*July 2016 - September 2020*West Lafayette, IN, USA

Purdue University, Department of Computer Science

- Role: Graduate Researcher
- Advisor: Dr. Christoph Hoffmann
- Funding Agency: NSF (Partial Funding)
- Description: Doctoral thesis research. Pioneered parametric generation methods for Topological Interlocking Configurations based on free-form geometric domains.
- Results published in International Journal of Architectural Computing, IUTAM Symposium on Architectured Material Mechanics 2018, and IEEE Games, Multimedia, Animation and Multiple Realities Conference (GMAX) 2020.

• Creating a Digital Environment for Enabling Data-Driven Science (DEEDS)

August 2017 - May 2020 West Lafayette, IN, USA

Purdue University, Rosen Center for Advanced Computing

- Role: Graduate Research Assistant and Senior Software Developer
- PI: M.Sc. Ann Christine Catlin
- Funding Agency: NSF
- Description: Designed and proposed components to support the representation and analysis of multi-dimensional hierarchical data from multi-disciplinary research projects.
- Results published in Future Generation Computer Systems, Computing in Science & Engineering, and Gateways
 2018

• NIPTE-FDA Excipients Risk Analysis Tool

May 2017 - August 2017

Purdue University, Rosen Center for Advanced Computing

West Lafayette, IN, USA

- Role: Graduate Research Assistant and Senior Software Developer
- PI: M.Sc. Ann Christine Catlin
- Funding Agencies: NIPTE and FDA
- Description: Consolidated a platform for risk assessment evaluation during drug manufacturing based on excipients, dosage forms, functionalities, manufacturing methods, and grades.
- Results published in AAPS PharmSciTech.

• Building a Modular Cyber-Platform for Preservation of Large Engineering and Science Data May 2016 - May 2017 Purdue University, Rosen Center for Advanced Computing West Lafayette, IN, USA

- Role: Graduate Research Assistant and Software Developer
- PI: M.Sc. Ann Christine Catlin
- Funding Agency: NSF
- Description: Architected scalable systems to support and improve sharing files and data visualization of large, classified datasets from science and engineering disciplines.
- Results published in Computing in Science & Engineering.

• Assemblable Interlocking Polyominoes

January 2015 - July 2016

Purdue University, Department of Computer Science

West Lafayette, IN, USA

- Role: Graduate Researcher
- Advisor: Dr. Christoph Hoffmann
- Description: Explored the interlocking properties of assemblable polyominoes and their usage to represent monotonic Boolean expressions.

Low-Cost Smart-Home Environments Based on Embedded Systems

March 2014 - *February* 2015

Barranquilla, Colombia

Universiad del Norte, GRECIS Research Group

- Role: Graduate Researcher
- Advisors: Dr. Miguel Jimeno and MSc. Augusto Salazar
- Funding Agency: Colciencias
- Description: Classified the trends from proposed smart home environments to formulate a scalable, low-cost system for indoor domotic environments.
- Results published in the International Journal of Automation and Smart Technology.

• NORIA: Node Reservation Intelligent Agent

Universiad del Norte, Department of Systems Engineering and Computation

• Role: Graduate Researcher

- Advisor: Dr. Jose Marquez
- Description: Formulated a node reservation protocol for ad-hoc wireless networks to prioritize routing and establish exclusive communication paths between nodes.

• Detection of Source Code Similitude in Academic Environments

January 2008 - December 2008

Universiad del Norte, Department of Systems Engineering and Computation

Barranquilla, Colombia

July 2010 - November 2012

Barranquilla, Colombia

- Role: Undergraduate Researcher
- o Advisor: Dr. Lucy Garcia
- Description: Explored the problem of code plagiarism in freshman programming courses and proposed a system to detect similar codes and rank the similarities.
- Results published in Computer Applications in Engineering Education.

GRANTS

Development of Core Skills and Teaching Practices in the Presence of AI (Extension)

October 2024 - October 2025 West Lafayette, IN, USA

Purdue University, Office of the Provost

Funding Agency: Innovation Hub – Purdue University

Number: IH-AI-23002Amount: \$99,373.73

Development of Core Skills and Teaching Practices in the Presence of AI

July 2023 - August 2024 West Lafayette, IN, USA

Purdue University, Office of the Provost

Funding Agency: Innovation Hub – Purdue University

Number: IH-AI-23002Amount: \$87,974.28

TEACHING

• Instructor of Record: CS251 - Data Structures and Algorithms

Spring 2025

Purdue University, Department of Computer Science

West Lafayette, IN, USA

West Lafayette, IN, USA

West Lafayette, IN, USA

- ∘ Teaching Evaluation: —/5.0
- Enrollment: 284 students.
- Staff: 11 GTAs, 21 UTAs

• Instructor of Record: CS253 - Data Structures and Algorithms for DS/AI

Spring 2025

Purdue University, Department of Computer Science

- Teaching Evaluation: —/5.0
- Enrollment: 68 students.
- Staff: 2 GTAs, 10 UTAs

• Instructor of Record: CS251 - Data Structures and Algorithms

Fall 2024

Purdue University, Department of Computer Science

Turuue amoersity, Department of Compu
Teaching Evaluation: 4.31/5.0

- Enrollment: 621 students.
- Staff: 17 GTAs, 41 UTAs

• Instructor of Record: CS251 - Data Structures and Algorithms

Summer 2024

Purdue University, Department of Computer Science

West Lafayette, IN, USA

- Teaching Evaluation: 4.5/5.0
- Enrollment: 48 students.
- Staff: 2 GTAs, 5 UTAs

• Instructor of Record: CS251 - Data Structures and Algorithms

Spring 2024

Purdue University, Department of Computer Science

• Teaching Evaluation: 4.02/5.0

West Lafayette, IN, USA

- Teaching Evaluation: 4.02/5.
- Enrollment: 353 students. Staff: 26 TAs

Instructor of Record: CS253 - Data Structures and Algorithms for DS/AI

Spring 2024

Purdue University, Department of Computer Science

West Lafayette, IN, USA

- Teaching Evaluation: 4.3/5.0
- Enrollment: 67 students.
- Staff: 13 TAs
- Contributed to the development of the course.

• Instructor of Record: CS177 - Programming with Multimedia Objects Fall 2023 Purdue University, Department of Computer Science West Lafayette, IN, USA • Teaching Evaluation: 4.39/5.0 • Enrollment: 331 students. o Staff: 21 TAs • Instructor of Record: CS177 - Programming with Multimedia Objects Summer 2023 West Lafayette, IN, USA Purdue University, Department of Computer Science • Teaching Evaluation: 3.34/5.0 • Enrollment: 37 students. o Staff: 5 TAs • Instructor of Record: CS251 - Data Structures and Algorithms Summer 2023 Purdue University, Department of Computer Science West Lafayette, IN, USA • Teaching Evaluation: 3.76/5.0 • Enrollment: 40 students. o Staff: 6 TAs • Instructor of Record: CS177 - Programming with Multimedia Objects Spring 2023 Purdue University, Department of Computer Science West Lafayette, IN, USA • Teaching Evaluation: 4.2/5.0 • Enrollment: 347 students. o Staff: 25 TAs • Instructor of Record: CS251 - Data Structures and Algorithms Fall 2022 Purdue University, Department of Computer Science West Lafayette, IN, USA • Teaching Evaluation: 4.56/5.0 • Enrollment: 415 students. ∘ Staff: 30 TAs • Instructor of Record: CS182 - Foundations of Computer Science Summer 2022 Purdue University, Department of Computer Science West Lafayette, IN, USA Teaching Evaluation: 4.54/5.0 • Enrollment: 55 students. • Staff: 7 TAs • Instructor of Record: CS251 - Data Structures and Algorithms Summer 2022 Purdue University, Department of Computer Science West Lafayette, IN, USA Teaching Evaluation: 4.48/5.0 • Enrollment: 53 students. o Staff: 8 TAs Instructor of Record: CS251 - Data Structures and Algorithms Spring 2022 Purdue University, Department of Computer Science West Lafayette, IN, USA • Teaching Evaluation: 3.88/5.0 • Enrollment: 339 students. o Staff: 26 TAs • Instructor of Record: CS251 - Data Structures and Algorithms Fall 2021 Purdue University, Department of Computer Science West Lafayette, IN, USA Teaching Evaluation: 4.63/5.0 • Enrollment: 381 students. Staff: 30 TAs • Instructor of Record: CS182 - Foundations of Computer Science Summer 2021 Purdue University, Department of Computer Science West Lafayette, IN, USA • Teaching Evaluation: 4.35/5.0 • Enrollment: 96 students. o Staff: 8 TAs • Instructor of Record: CS251 - Data Structures and Algorithms Summer 2021 Purdue University, Department of Computer Science West Lafayette, IN, USA Teaching Evaluation: 4.73/5.0 • Enrollment: 58 students. Staff: 6 TAs

• Instructor of Record: CS251 - Data Structures and Algorithms Spring 2021 Purdue University, Department of Computer Science West Lafayette, IN, USA • Teaching Evaluation: 4.33/5.0 • Enrollment: 248 students. Staff: 25 TAs • Instructor of Record: CS251 - Data Structures and Algorithms Fall 2020 Purdue University, Department of Computer Science West Lafayette, IN, USA • Teaching Evaluation: 4.43/5.0 • Enrollment: 342 students. o Staff: 22 TAs • Graduate Teaching Assistant: CS251 - Data Structures and Algorithms Spring 2016 Purdue University, Department of Computer Science West Lafayette, IN, USA o Instructor: Dr. Daniel Aliaga • Graduate Teaching Assistant: CS334 - Fundamentals of Computer Graphics Fall 2015 Purdue University, Department of Computer Science West Lafayette, IN, USA o Instructor: Dr. Daniel Aliaga • Graduate Teaching Assistant: CS251 - Data Structures and Algorithms Summer 2015 Purdue University, Department of Computer Science West Lafayette, IN, USA o Instructor: Dr. Gustavo Rodriguez-Rivera • Graduate Teaching Assistant: CS251 - Data Structures and Algorithms Spring 2015 Purdue University, Department of Computer Science West Lafayette, IN, USA • Instructor: Dr. Christoph Hoffmann • Graduate Teaching Assistant: CS251 - Data Structures and Algorithms Fall 2014 Purdue University, Department of Computer Science West Lafayette, IN, USA • Instructor: Dr. Susanne Hambrusch • Instructor of Record: ELP8510 - Mobile App Programming Fall 2013 Universidad del Norte, Department of Systems Engineering and Computation Barranquilla, Colombia • Enrollment: 19 students. • Instructor of Record: IST2088 - Algorithms and Programming I Fall 2013 Universidad del Norte, Department of Systems Engineering and Computation Barranquilla, Colombia • Enrollment: 35 students. o Staff: 1 UTA • Instructor of Record: IST2121 - Multimedia for Communications Fall 2013 Universidad del Norte, Department of Systems Engineering and Computation Barranquilla, Colombia • Enrollment: 22 students. • Instructor of Record: ELP8510 - Mobile App Programming Spring 2013 Universidad del Norte, Department of Systems Engineering and Computation Barranquilla, Colombia • Enrollment: 20 students. • Instructor of Record: IST2121 - Fundamentals of Computer Graphics Spring 2013 Universidad del Norte, Department of Systems Engineering and Computation Barranquilla, Colombia • Enrollment: 20 students. • Instructor of Record: IST2121 - Multimedia for Communications Spring 2013 Universidad del Norte, Department of Systems Engineering and Computation Barranquilla, Colombia • Enrollment: 20 students. Instructor of Record: ELP8510 – Mobile App Programming Fall 2012 Universidad del Norte, Department of Systems Engineering and Computation Barranquilla, Colombia • Enrollment: 22 students. • Instructor of Record: IST2121 - Multimedia for Communications Fall 2012 Universidad del Norte, Department of Systems Engineering and Computation Barranquilla, Colombia • Enrollment: 21 students. • Instructor of Record: IST2121 - Fundamentals of Computer Graphics Fall 2012 Universidad del Norte, Department of Systems Engineering and Computation Barranquilla, Colombia • Enrollment: 12 students. • Instructor of Record: IST2121 - Multimedia for Communications Spring 2012 Universidad del Norte, Department of Systems Engineering and Computation Barranquilla, Colombia

Enrollment: 20 students.
 Andres Bejarano - Page 9

• Instructor of Record: IST2088 - Algorithms and Programming I

Universidad del Norte, Department of Systems Engineering and Computation

• Enrollment: 30 students.

• Instructor of Record: IST2088 - Algorithms and Programming I

Universidad del Norte, Department of Systems Engineering and Computation

• Enrollment: 30 students.

Spring 2011

Barranquilla, Colombia

Barranquilla, Colombia

Fall 2010

PROFESSIONAL MEMBERSHIP AND SERVICE

Conference Papers Reviewer	Spring 2024
2025 IEEE Global Engineering Education Conference (EDUCON)	

 Conference Demonstrations Reviewer Fall 2024 2025 ACM SIGCSE TS

• Conference Papers Reviewer Summer 2024 2025 ACM SIGCSE TS

• Conference Papers Reviewer Summer 2024 2024 IEEE Frontiers in Education

• Journal Paper Reviewer Summer 2024 Springer Nature Computer Science

• Conference Poster Judge Spring 2023 Undergraduate Research Fair, Purdue University

 Hackathon Judge Spring 2023 BoilerMake X Hackathon, Purdue University

• Journal Paper Reviewer Fall 2022 Concurrency and Computation: Practice and Experience

• Conference Poster Judge Spring 2021 2021 ACM Tapia

• Conference Papers Reviewer Fall 2020 2020 IEEE Games, Animation, Multimedia, and Multiple Realities - IEEE GMAX

Spring 2014 • Presidential Election Hackathon - Co-host

Universidad del Norte, Department of Systems Engineering and Computatio • Computer Graphics and Videogames Workshop - Host Summer 2013

Universidad del Norte, Department of Systems Engineering and Computatio • Computer Graphics Workshop - Host Summer 2012 Universidad del Norte, Department of Systems Engineering and Computatio

• CCEIS Student Group – Member January 2006 - December 2009 Universidad del Norte, Department of Systems Engineering and Computatio

DEPARTMENTAL SERVICE (COMPUTER SCIENCE, PURDUE UNIVERSITY)

• Meeting with Prospective Ph.D. Students - Teaching Assistants Session March 11th, 2025 Purdue University, Department of Computer Science West Lafayette, IN, USA

• GoBoiler 2024 Program Welcome Faculty Fall 2024 Purdue University, Department of Computer Science West Lafayette, IN, USA

• Undergraduate Study (CS) Committee Spring 2024 - Present Purdue University, Department of Computer Science West Lafayette, IN, USA

• Lecturer Reviewer: Xiaojin Liu Spring 2024 Purdue University, Department of Computer Science West Lafayette, IN, USA

• Lecturer Reviewer: William Crum Spring 2024 Purdue University, Department of Computer Science West Lafayette, IN, USA

• CS407 Sprint Reviewer Fall 2023 - Present Purdue University, Department of Computer Science West Lafayette, IN, USA

• Teaching Assistant Orientation - Guest Speaker Fall 2023 - Present Purdue University, Department of Computer Science West Lafayette, IN, USA

• Lecturer Mentoring: Jessica Conner-Strunk Summer 2023 - Fall 2023 Purdue University, Department of Computer Science West Lafayette, IN, USA

• Undergraduate AI and DS Committee Fall 2022 - Fall 2023 Purdue University, Department of Computer Science West Lafayette, IN, USA

HONORS, AWARDS, AND CERTIFICATIONS

 IMPACT Faculty Learning Community Spring 2025 Purdue University, Center For Instructional Excellence West Lafayette, IN, USA • Teaching for Tomorrow Fellowship Award - Junior Fellow Fall 2024 Purdue University, Center For Instructional Excellence West Lafayette, IN, USA • Teaching for Tomorrow Fellowship - Junior Fellow Fall 2023 - Spring 2024 Purdue University, Center For Instructional Excellence West Lafayette, IN, USA • Foundations of College Teaching Certificate Program Spring 2023 Purdue University, Center For Instructional Excellence West Lafayette, IN, USA Worldview Workshop Fall 2022 Purdue University, Office of the Dean of International Program West Lafayette, IN, USA • Raymond Boyce Graduate Teacher Award Fall 2015 Purdue University, Department of Computer Science West Lafayette, IN, USA • Diploma in University Pedagogy 2013 Universidad del Norte, Center for Instructional Excellence (CEDU) Barranquilla, Colombia • Graduate Scientific Merit, Finalist 2012 Universidad del Norte, School of Engineering Barranquilla, Colombia

STUDENT CLUB ADVISING

 Google Development Club Fall 2021 - Present Purdue University, Student Activities and Organizations West Lafayette, IN, USA • Hack the Future at Purdue Club Fall 2022 - Present Purdue University, Student Activities and Organizations West Lafayette, IN, USA • Purdue Magic Club Fall 2022 - Spring 2023 Purdue University, Student Activities and Organizations West Lafayette, IN, USA • Computer Graphics and Mobile App Development Student Groups Spring 2012 - Spring 2014 Universidad del Norte Barranquilla, Colombia

MEDIA

• Innovation Hub News October 2024

Purdue University, Student Activities and Organizations

West Lafayette, IN, USA

• Link: Is artificial intelligence enhancing student learning or hindering critical thinking? Purdue professors weigh in on the pros and cons of classroom AI

• Superheroes of Science

January 2024

Purdue University, College of Science

West Lafayette, IN, USA

• Link: A Career in Automated Algorithm Analysis