Simón Pedro González
Curriculum Vitae

CONTACT INFORMATION

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EDUCATIONAL EXPERIENCE

August 2024 - present	**University of Utah**, Salt Lake City, Utah. **Master of Science in Artificial Intelligence**.
March 2016 - December 2022	**National University of San Juan**, San Juan, Argentina. **Bachelor of Science in Computer Science**. 5-year program. GPA: 9.97 out of 10. Thesis: *Development of Scientific Software to Calculate Membership Probabilities in Star Clusters.*
March 2016 - July 2019	**National University of San Juan**, San Juan, Argentina. **University Level Programming Technician**. 3-year program. GPA: 10 out of 10.

ADDITIONAL COURSEWORK

July 2021	**School of Computer Science 2021**, University of Buenos Aires, Buenos Aires, Argentina. Course: *Machine Learning with Limited Data*. 15-hour program.
August 2020 - December 2020	**National University of Córdoba**, Córdoba, Argentina. Course: *Software design for scientific computing*. 60-hour program.
July 2019	**School of Computer Science 2019**, University of Buenos Aires, Buenos Aires, Argentina. Courses: *Probabilistic Classifiers in Machine Learning*. 15-hour program. *Quantum Computing and Digital Physics*. 15-hour program. *Development and Automated Testing of RESTful APIs*. 15-hour program.

HONORS AND AWARDS

October 2023	**National University of San Juan Gold Medal and Diploma of Honor** for achieving the highest GPA in the 2022-2023 graduating class.
July 2023	**Fulbright scholarship** to pursue a master's degree in the United States starting fall 2024.
December 2020 - December 2021	**National University of San Juan Internal Research and Development Fellowship** (1-Year Stipend). Research Project: *Analysis and Implementation of Improvements in Star Cluster Detection and Membership Estimation Algorithms*.
October 2020	**National University of San Juan Flag Bearer Academic Honor** for achieving the highest GPA among final-year students.
November 2019	**Santander Río Academic Merit Award** for achieving a top GPA among Argentine university students in 2019.

PROFESSIONAL EXPERIENCE

BridgeNext (formerly Folcode), San Juan, Argentina.
Digital Consultancy and Web-based Digital Product Factory.

August 2020 - present

Technical Leader and Software Architect
- Led client meetings, developed prototypes, delivered technical demonstrations, and planned and estimated projects.
- Architected and led the development of:
    - A multitenant e-learning platform.
    - An interactive STEM-focused learning ecosystem.
    - A governmental web platform to encourage sustainable practices in the tourism industry.
- Engaged in programming and DevOps responsibilities.
- Mentored colleagues.

May 2021 - July 2022

Staff Engineer
- Led performance reviews and crafted professional development plans.
- Led knowledge-sharing sessions.
- Conducted technical interviews.
- Proposed, prioritized, and pursued company-wide OKRs related to defining roles, processes, technologies, and best practices for web application development.

December 2019 - August 2020

Back-End Developer.
Developed, deployed, and maintained web applications.

RESEARCH EXPERIENCE

Institute of Informatics, School of Exact, Physical, and Natural Sciences, National University of San Juan (UNSJ), San Juan, Argentina.

March 2019 - present

Research Assistant
- Designed, developed, documented, and maintained open-source scientific software for star cluster data analysis.
- Analyzed data from local educational and quality-of-life surveys using unsupervised learning techniques.

TEACHING EXPERIENCE

School of Exact, Physical, and Natural Sciences , National University of San Juan (UNSJ), San Juan, Argentina.

November 2021 - December 2021

Teaching assistant in *Methods for Data Analysis* postgraduate course.
- Taught Unsupervised Machine Learning methods lessons.
- Responded to student inquiries and guided data analysis projects.

January 2018 - January 2019

Teaching assistant in *Basic Mathematics* course.
- Conducted tutorial classes and drop-in sessions.

SELECTED PUBLICATIONS AND PRESENTATIONS

- González, S. P., Herrera M. & Ruiz, S. (2023). *SCLUDAM: Software for Astrometric Membership Probability Calculation in Star Clusters* . Revista de Matemática Aplicada, Computacional e Industrial MACI, 9. ISSN 2314-3282. Presented at:
    - IX Congreso de Matemática Aplicada, Computacional e Industrial, May 2023. Organized by the Argentine Association of Applied, Computational, and Industrial Mathematics. Santa Fé, Argentina.
    - XII Friends of Friends Meeting, April 2023. Organized by the Astronomical Observatory of Córdoba. Córdoba, Argentina.
- González, S. P., Herrera M. & Romagnano, M. (2021). *Quality of Life Analysis of San Juan's Population Applying Data Science* . Anales del Simposio Argentino de Grandes Datos, 50, 108 - 118. ISSN 2683-8966. Presented at:
    - Simpiosio Argentino de Grandes Datos, Jornadas Argentinas de Informática e Investigación Operativa, October 2021. Organized by the Argentine Informatics Society. Virtual Conference.
- Herrera, M., González, S. P. & Aballay, L. (2020). *Analysis of National University of San Juan Graduates Using Data Science Techniques* . Cuaderno de Resúmenes de las Jornadas Latinoamericanas de Ingreso y Permanencia en Carreras Científico-Tecnológicas 2020, 7, 58-65. ISBN 978-987-4998-65-1. Presented at:
    - Jornadas Latinoamericanas de Ingreso y Permanencia en Carreras Científico-Tecnológicas, November 2020. Organized by the National Technological University. Tucumán, Argentina.
- Alejo, A. D., González, J. F. & González, S. P. (2020). *Stellar cluster membership study using Gaia DR2* . Cuaderno de Resúmenes de la Asociación Argentina de Astronomía, 62, 64-65.

SKILLS

Languages:
- Spanish (native).
- English (advanced)
    - TOEFL iBT, 2023 (Score 111).
    - Certificate in Advanced English, University of Cambridge, 2019 (Grade A, C2 Level).

Software:
- Software development team management and agile practices.
- Scientific Software Development:
    - Python (advanced).
    - R, C++, CUDA (intermediate).
    - Test-driven Development, software documentation (advanced).
- Web Application Development:
    - Java, Spring Boot, Spring microservices, TypeScript, NodeJS (advanced).
    - PHP, Laravel, HTML, CSS, React (intermediate).
- Development Tools: Git, GitHub, Jira, Bitbucket, VSCode, IntelliJ, Swagger.
- Databases: MySQL, MariaDB, MongoDB, Neo4j.
- Deployment and CI/CD tools: Docker, Docker Compose, Kubernetes, Jenkins, AWS ecosystem (S3, EC2, SES, AIM, Route53, EKS, RDS).