Simón Pedro González

CONTACT INFORMATION

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PROFILE

Ph.D. student in Computing (AI) at the University of Utah working on algorithms and machine learning for scientific data. Current work includes multidimensional distribution distances, spatial scan statistics, and ML-based diagnosis of calibration errors in radio-interferometric data. 5+ years of industry experience building production software systems.

EDUCATION

University of Utah, Salt Lake City, UT:

- *Ph.D. in Computing — Artificial Intelligence (Aug 2026 – Present)*
- *M.S. in Computing — Artificial Intelligence (Aug 2024 – May 2026)*

National University of San Juan, Argentina: *B.S. in Computer Science (5-year program) (Mar 2016 – Dec 2021)*

RESEARCH EXPERIENCE

Kahlert School of Computing, University of Utah, Salt Lake City, UT
Ph.D. Researcher (Aug 2026 – Present)

- Algorithms for multidimensional Kolmogorov–Smirnov distance.
- Spatial scan statistics and large-scale anomaly detection

Department of Physics & Astronomy, University of Utah, Salt Lake City, UT
Research Assistant (Jan 2026 – Present)

- Developing machine-learning–based pipelines for analysis and diagnosis of calibration errors in radio interferometric data.

Institute of Informatics, National University of San Juan, San Juan, Argentina.
Research Assistant (Mar 2019 – Jul 2024)

- Open-source scientific software for astronomical data analysis.

INDUSTRY EXPERIENCE

Bridgenext (formerly Folcode), Digital Consultancy & Product Studio.
Technical Leader & Software Architect (Aug 2020 – Jul 2024)
Staff Engineer (May 2021 – Jul 2022)
Back-End Developer (Dec 2019 – Aug 2020)

- Led architecture and delivery of production platforms focused on STEM e-learning systems.
- Led technical decision-making, mentored engineers, conducted interviews, and drove engineering best practices and internal standards.
- Worked with clients on scoping, prototyping, estimation, and technical demonstrations.

PROJECTS

- *raptor-stats:* open-source implementation of scalable zonal statistics for large geospatial datasets.
- *pyscan-stats:* modernization and packaging of a C++ spatial scan statistics library.
- *SCLUDAM:* open-source scientific software for star cluster detection and membership probability estimation.
- *Air Quality Forecast Downscaling:* deep-learning-based spatial downscaling models for pollution forecasts.

HONORS AND AWARDS

Fulbright Scholar, United States, *(July 2023)*.