

Gabriel Souto

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Education

Carnegie Mellon University, Pittsburgh, PA May 2030

Bachelor of Science in Statistics and Machine Learning (intended)

Selected Coursework: -

Gilmour Academy, Gates Mills, OH May 2026

GPA: 4.153/4.0

Selected Coursework: AP Calculus AB-BC, AP Computer Science A, AP Statistics, Multivariable Calculus
Cum Laude – Highest Honors all four years

Skills

Programming Languages: Python, Java, R, SQL

Software & Tools: Git, Jupyter, UNIX, LaTeX, Google Workspace

Languages: English (Fluent), Portuguese (Fluent), Spanish (Working)

Experience

Intern October 2025 – Present

Cleveland Clinic Foundation, Cleveland, OH

- Working under Dr. Mata in Mata Lab
- Conducting data processing and statistical analysis with Python to prepare datasets for statistical analysis and modeling
- Assisted in interpreting computational results to support ongoing bioinformatics research

Bioinformatics Intern May – October 2025

Case Western Reserve University, Cleveland, OH

- Conducted research under a graduate researcher in the Wang Lab
- Conducted analysis on colorectal cancer and liver metastasis samples (~10k+ cells) using R for preprocessing, normalization, and differential expression
- Collaborated with 2 researchers to interpret results and present findings in capstone presentation

Projects

Gut Dysbiosis Bioinformatics Analysis

- Processed and analyzed single-cell RNA sequencing datasets from GEO using R (Seurat, tidyverse, ggplot2)
- Performed clustering and dimensionality reduction (PCA & UMAP) to identify cell populations
- Quantified condition-specific cluster proportions and gene expression changes associated with gut dysbiosis

Leadership & Activities

Robotics Software Captain August 2022 – May 2026

Gilmour Academy, Gates Mills, OH

- Led a 5-member software team in designing competition robot systems Junior and Senior year
- Won 5+ team awards and led team to first qualification to states ever