Gustavo Estrela de Matos

Tech Lead @ Geekie

Native Portuguese | **Fluent** English

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Experiences

Geekie

São Paulo, Brazil

Tech Lead — May 2022 - Present

Worked on two of the main Geekie products: Geekie One, a data-driven platform for basic education; and Geekie Teste, a test platform that uses IRT to provide students abilities scores that are comparable with ENEM (Brazilian High School National Exam) scores.
- Led teams of 4-5 developers, assisting their technical development and also creating a high-performance environment (resulting in the promotion of one team member to Software Engineer II);
- Worked on updating legacy systems to Python 3, focusing on Geekie Teste, and also created pipelines to run tests automatically;
- Designed and implemented an async solution that enabled school Coordinators to send student grading reports to parents;
- Collaborated on implementing GraphQL in our application, which became the first option for most squads when fetching data;
- Worked on a refactor of Geekie Teste that allowed more than 20K simultaneous students answering tests.

Software Engineer — January 2020 - May 2022

Worked as a full-stack engineer in squads of 4-6 people.
- Worked on the front-end, using React and React-Native, and also on the back-end, using Python and Flask;
- Designed and implemented a solution that allowed creating reports that aggregated the performance of many students, with different granularity;
- Worked on the refactor of a core feature, allowing schools to offer courses to students of different grade levels.

Skills: Redis Queue, Heroku, AWS ECS, AWS EC2, AWS Lambda, Flask, React, React-Native, Python, BigQuery, MongoDB, PostgreSQL, ORM/ODM.

Butantan Institute

São Paulo, Brazil

Graduate Researcher (with FAPESP Scholarship) — January 2018 - February 2021

Masters project in a team of 2 (student and advisor). We created a Python program (github.com/gustavoem/SigNetMS) that allowed Cell Signaling Model Selection, using Bayesian methods to create estimates of marginal likelihood of models.

Undergraduate Researcher (with FAPESP Scholarship) — May 2017 - December 2017

Scientific initiation in a team of 2 (student and advisor). We created new parallel algorithms for the U-Curve problem, using graph partition. Results were presented as a conclusion project for the bachelor title in computer science and also in a published paper.

Undergraduate Researcher (with FAPESP Scholarship) — January 2015 - July 2015

Scientific initiation in a team of 2 (student and advisor). We investigated the usage of new data structures for the U-Curve problem. We created a new algorithm, UCSR, implemented in C++ and described in a published paper.

Skills: SciPy, NumPy, SymPy, Celery, Pandas, Machine Learning, Graph Theory, Optimization, Parallel Computing, OpenMP.

Education

Institute of Mathematics and Statistics (University of São Paulo)

São Paulo, Brazil

Master of Science in Computer Science — January 2018 - February 2021

Dissertation with the title "Identification of cell signaling pathways based on biochemical reaction kinetics repositories". Research project awarded with a São Paulo Research Foundation (FAPESP) scholarship.

Bachelor of Science in Computer Science — February 2013 - December 2017

Ranked #3 out of 50 students. GPA: 9/10.

Texas A&M University

College Station, Texas

Science Without Borders, Study abroad program in Computer Science — September 2015 - May 2016

Certifications and Awards

High Academic Merit Award awarded by the Computer Science Department of the Institute of Mathematics and Statistics of the University of São Paulo. April 2018.

TOEFL iBT total score: 93/120.