Levi Sprung

levibsprung@gmail.com | linkedin.com/in/levi-sprung | github.com/levibsprung | levisprung.com

EDUCATION

Colorado School of Mines (3.80 GPA)

Golden, CO

Bachelor of Science in Computer Science

Aug. 2021 - May 2025

Master of Science in Data Science

Jan. 2025 - May 2026

- ICR C-MAPP Scholar (2023-2024)
- Relevant coursework: LLMs, Advanced Data Structures & Algorithms, Network Science, Cloud Computing, Bioinformatics, Intro to Mathematical Statistics, Statistical Modeling, Operating Systems
- Studied at University of Oviedo in Oviedo, Spain during Fall 2024

Experience

General Atomics Englewood, CO

Ground Software Intern

Jun 2024 - Aug 2024

- Designed standard database schema in MariaDB on AWS server to be used for current and future missions while accounting for possible complexities with telemetry data storage
- Authored design documents detailing design of database and data ingestion scripts, enabling engineers to incorporate the database into mission operations and adapt the schema to each mission
- Collaborated with two other interns to build up GA's new ground software system, utilizing Python, OpenC3 COSMOS, MariaDB, and ActiveMQ

Ground Software Intern

Jun 2023 - Aug 2023

- Developed relational MariaDB database on AWS server to store spacecraft telemetry data, improving troubleshooting capability by enabling long-term trending and more effective customer communication (still in operation today)
- Enabled rapid resolution and mitigation of critical spacecraft anomalies by developing Python scripts, reducing troubleshooting time by 30%
- Implemented user-friendly GUI in Python using tkinter (from Python standard library) that simplified spacecraft commanding, cutting operator errors and improving mission reliability

Colorado School of Mines

Golden, CO

 $Teaching\ Assistant\ -\ Algorithms$

Jan 2024 - May 2024, Jan 2025 - Present

- TA'ed for 120-200 students for three semesters, with 2 hours of office hours and 3-5 hours of grading per week
- Conducted grading interviews with students to test their conceptual knowledge and communication skills
- Collaborated with professors and other TAs to improve homework and projects

Projects

Scrabble Board Detection and Traceback | Python, OpenCV, pytesseract

Apr 2025 - Present

- Used computer vision and optical character recognition to determine contents of a Scrabble board from a photo
- Wrote scoring algorithm and traceback algorithm to triangulate all possible sequences of moves for a photo of a Scrabble game

Knowledge Graph Generation - HiLabs | Python, LangChain, LLMs

Sep 2023 - Dec 2023

- Applied prompt engineering techniques to design and optimize prompts, enabling Meta's Llama LLM to generate Knowledge Graphs from university course materials for structured data representation and comprehension
- Worked with team of 4 utilizing Agile practices

NFL Combine Data Analysis | Python, scikit-learn, numpy, pandas, matplotlib, seaborn Nov 2

Nov 2023 - Dec 2023

- Developed predictive models to forecast NFL player statistics based on NFL Combine performance data
- Used pandas, pyplot, and seaborn for EDA, applied transformations on the data using numpy, and used scikit-learn to run several models with various parameters

TECHNICAL SKILLS

Languages: Python, Java, C/C++, SQL (MySQL, Postgres, MariaDB), R

Developer Tools: Git, Docker, VS Code, Visual Studio, Eclipse, Jupyter Notebooks

Libraries: PyTorch, pandas, NumPy, Matplotlib, OpenCV, pytesseract, LangChain, scikit-learn, seaborn