Sri Chandrasekaran

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Education

University of California, Berkeley — Berkeley, CA

Bachelor of Arts in Data Science and Applied Math — *May 2026*

Relevant Coursework: *Data Structures, Algorithms, Machine Learning, Artificial Intelligence, Linear Algebra, Optimization Models, Signal Processing, Numerical Analysis, Data Science, Structure of Computer Programs, Discrete Mathematics*

Experience

Engineering Intern — June 2024 – Aug 2024

Fragile — *San Francisco, CA*

- Contributed to the development of an internal data aggregation platform used by 20+ stakeholders, optimizing backend infrastructure and AWS S3 integration to ensure seamless access to critical resources.
- Implemented a revised data architecture using dbt and Prefect, improving ETL automation and streamlining testing workflows, increasing efficiency and reliability.
- Automated Snowflake executions, reducing testing frequency by 75% and driving substantial cost savings by optimizing resource usage and improving operational efficiency for the Data team.

Undergraduate Researcher — Jan 2024 – Jan 2025

UCSF - Larson Advanced Imaging — *San Francisco, CA*

- Collaborated with an interdisciplinary team utilizing Python to develop and analyze synthetic hyperpolarized 13C MRI data from 15 patients for myocardial perfusion quantification.
- Implemented advanced image analysis algorithms, including Non-negative Matrix Factorization (NMF), to extract meaningful features and reduce dimensionality of MRI data.
- Applied optimization methods such as constrained decomposition and linear regression to refine partial volume corrections, improving the accuracy of myocardial perfusion measurements.

Undergraduate Researcher — May 2023 – May 2024

Berkeley NetSys Lab — *Berkeley, CA*

- Collaborated with PhD candidate Sarah McClure to develop predictive models of network congestion dynamics, applying time-series analysis and machine learning techniques using Python and R
- Leveraged 50+ simulations to derive insights and inform the development of congestion control strategies, enhancing network efficiency through data-driven modeling approaches
- Contributed to the design and execution of experiments evaluating congestion control algorithms, refining models to forecast congestion patterns and proactively mitigate disruptions

Software Engineer Intern — May 2023 – Aug 2023

Neuroleap Corp — *San Jose, CA*

- Integrated custom PDF generation functionality using Axios; accelerating the report creating process and ensuring real-time delivery of comprehensive insights to users.
- Developed a React-based data processing and aggregation system, integrating APIs for autism diagnosis and streamlining data processing time by 50%, enhancing report generation speed and operational efficiency.

Co-Founder & Chief Executive Officer — July 2020 – Present

STEMz Learning — *Sacramento, CA*

- Leading a 5-person engineering team in the development of software solutions focused on data processing, NLP modeling, and platform enhancements, while overseeing optimization of data pipelines to aggregate and analyze educational data for personalized student experiences.
- Managing the creation and continuous improvement of a ReactJS-based educational platform with 2,000+ active users, supporting both virtual classes and online resources for students
- Leading the expansion of the curriculum, now covering 12+ STEM subjects, such as Circuits and Basics of Coding, and contributing to the educational growth of over 700 students.

Projects

Build Your Own World | *Java* — April 2023 – May 2023

- Designed and implemented a 2D tile-based world exploration engine that randomly generates a graphical tile-based world with 15-30 rooms using a tile renderer, allowing users to move around and interact with world objects
- Implemented a GUI to display information on where users are located in the world, other key characteristics and a light source that can be turned on and off using the keyboard; provided user interface to save, quit and reload their worlds
- Effectively managed the complexity of building a large system on building world exploration engine through better software engineering practices

Early Diagnosis of Parkinson's Disease with SVM Modeling | *Python* — Sept 2020 – March 2021

- Developed 5 Support Vector Machine (SVM) models using extracted voice parameters, incorporating Principal Component Analysis (PCA) in one model to optimize feature selection and reduce dimensionality.
- Achieved a 91% accuracy rate in the most accurate model using a 70:30 training-to-testing split, effectively discriminating between healthy patients and those with Parkinson's Disease.

Technical Skills

Languages: Python, Java, R, JavaScript, SQL, HTML/CSS, MATLAB

Frameworks & Technologies: React, TypeScript, Node.js, Flask, Git, NumPy, Matplotlib, pandas