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 platform utilized by 20+ stakeholders, focusing on data aggregation and optimizing backend functionality through tools like AWS S3 to ensure seamless access to critical resources within the portal.
- Implemented a revised data architecture using dbt and Prefect, streamlining automated testing workflows, resulting in improved system efficiency and increased reliability.
- Automated Snowflake executions, cutting 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 techniques, including Non-negative Matrix Factorization (NMF), to extract meaningful features and reduce dimensionality
- Applied optimization methods such as constrained decomposition and linear regression to improve partial volume corrections and ensure accurate myocardial perfusion measurements

Undergraduate Researcher — May 2023 – May 2024
Berkeley NetSys Lab — *Berkeley, CA*
- Collaborated with PhD candidate Sarah McClure to apply advanced modeling techniques, including time-series analysis and machine learning to develop predictive models of network congestion dynamics using Python and R
- Utilized 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 accurately forecast network congestion patterns and proactively mitigate disruptions

Software Engineer Intern — May 2023 – Aug 2023
Neuroleap Corp — *San Jose, CA*
- Integrated advanced custom PDF generation functionality through the use of Axios; this enhancement is anticipated to accelerate the report creation process and ensures users receive real-time comprehensive insights
- Developed a React-based data processing and aggregation system, integrating APIs for autism diagnosis; streamlined data processing time by 50% accelerating report generation and enhancing overall operational efficiency

Co-Founder & Chief Executive Officer — July 2020 – Present
STEMz Learning — *Sacramento, CA*
- Leading virtual classes of 40+ elementary school students and expanding our reach through over 20 classes, both online and in person, enriching the educational experience for a diverse student body
- Developing and curating a diverse STEM curriculum spanning 12+ subject areas, including Circuits, Basics of Coding, and more, contributing to over 700 students' growth and understanding
- Built a ReactJS-based educational platform with 2,000+ active users, providing a comprehensive learning experience for students to access online resources and virtual classes

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