Jacob A. Frausto

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EDUCATION

STANFORD UNIVERSITY   **STANFORD, CA**
M.S. Computer Science (AI specialization)   Expected June 2025
BROWN UNIVERSITY   **PROVIDENCE, RI**
Sc. B. Computer Science, GPA: 3.8/4.0   2019 – 2023

Relevant Coursework: *Computer Vision, Deep Learning, Software Engineering, Object-Oriented Programming, Algorithms and Data Structures, Discrete Structures and Probability, Machine Learning, Computational Linguistics, Data Science*
Technical Skills: Proficient – Java, Python, SQL, JavaScript, PyTorch, TensorFlow; Basic – HTML/CSS, Go, React, Beautiful Soup

EXPERIENCE

VERITAS AI   **Cambridge, MA**
AI & Data Science Mentor   July 2023 – August 2023
- Guided groups of 3-4 students in practical application of fundamental AI and ML concepts through hands-on projects.

BROWN INTERACTIVE 3D VISION & LEARNING LAB (IVL)   **Providence, RI**
Undergraduate Research Assistant   January 2022 – May 2023
- Designed and built a wrist-mounted multi-camera prototype to capture egocentric video data.
- Explored the application of Neural Radiance Field (NeRF) neural networks for scene modeling tasks.
- Managed lighting control module for interactive capture stage, resulting in a comprehensive dataset of dynamic and static scenes.

SAMSARA   **San Francisco, CA**
Software Engineer Intern   May 2022 – August 2022
- Developed a paginated report feature that provides customers with a holistic view of their device connectivity data.
- Employed data-driven insights to optimize the performance/behavior of several in-house React components.

AMAZON (AWS)   **New York, NY**
Software Development Engineer Intern   June 2021 – August 2021
- Designed and deployed a service in Java to collect and aggregate metrics on the performance of SAT/SMT solvers.
- Utilized AWS microservices to construct cloud-based pipelines and infrastructure.

BROWN UNIVERSITY   **Providence, RI**
Undergraduate Teaching Assistant   September 2020 – December 2020
- Assisted professor to re-design projects, manage coursework, and grade assignments for 300+ students.
- Held 4 hours of office hours weekly to help students understand technical and conceptual components of the course.

PROJECTS

Swish Science: Predicting NBA Success with Data Visualization, *Data Science*   May 2023
- Analyzed 13,504 data points, identifying possession-related statistics as key factors impacting NBA team success.
- Developed logistic regression model that predicts team performance with 81.18% test accuracy.

genClassBezier2D, *Personal*   January 2022
- Constructed a procedure to generate several datasets of abstract 2D shapes formed using Bezier curves.
- Produced the architecture for a CNN model that classifies said shapes with 97.53% testing accuracy.

GeoGuessing With Photo Localization and Deep Learning, *Computer Vision*   December 2021
- Trained and utilized a CNN model to predict the geographical location of images taken within the 50 U.S. states.
- Achieved a testing accuracy of 20.7% as opposed to 4% accuracy attained by human subjects.

Contrastive Self-Supervised Image Classification with SimCLR, *Deep Learning*   December 2021
- Implemented SimCLR self-supervised model, achieving 77.4% top-1 and 94.8% top-3 accuracy on a held-out test dataset.
- Demonstrated superiority of self-learned representations and highlighted optimization possibilities.

LEADERSHIP

THE BONNER COMMUNITY FELLOWSHIP   **Providence, RI**
Bonner Fellow   August 2019 – May 2023
- Served as a member of a cohort that aims to combine student community engagement with academic and career goals.
- Selected to partner with Providence Public Library to deliver technological skills to a total of 450+ adult students.

BROWN ENTREPRENEURSHIP PROGRAM   **Providence, RI**
Tech Team Member   October 2020 – May 2022
- Led a three-part webinar series on web development for startup ventures.
- Perform regular technical upkeep for the entrepreneurship community at Brown.

HACK@BROWN   **Providence, RI**
Publicity & Outreach Team Member   October 2019 – January 2021
- Established relationships with campus organizations and departments at Brown and 150+ other universities.
- Managed content creation and social media campaigns for 2,000+ followers on Twitter and Instagram.

OTHER SKILLS & INTERESTS

Language: Native Fluency in Spanish, Professional Proficiency in French

Interests: Ukulele, Bowling, Hiking/Camping, Soccer, Painting, Reading, Education, Entrepreneurship