

Jorge Arambula

arambulaqq@gmail.com • <https://github.com/arambu1a> • (209) 914-4817

EDUCATION

University of California, Davis | Davis, CA

Expected September 2025

B.A. - Cognitive Science

Coursework: Programming, Data Structures, Combinatorics, Artificial Intelligence, Computational Linguistics, Probability Theory, Computational Social Sciences, Analysis of Variance, Economics, Chicano Theoretical Perspectives

SKILLS & TECHNICAL TOOLS

Languages: Java, Python, JavaScript, C, HTML/CSS, Scheme

Technologies: Git, AWS, Jupyter Notebook, ReactJS, TensorFlow, Keras, Active Directory, Okta, Miradore, MATLAB

Certifications: CompTIA Network+(N10-008), CompTIA Security+(SY0-701)

EXPERIENCE

IT Systems Administrator | MasTec Advanced Technologies

April 2025 - Present

- Administered Windows-based infrastructure supporting 500+ users across 1000+ devices, delivering 98% uptime while ensuring full security compliance for a mid-sized organization.
- Led enterprise wide-security initiatives including comprehensive security patch management and automated backup systems, maintaining system integrity and disaster recovery capabilities across all business units.
- Implemented automated user provisioning process, reducing manual effort by 40% through custom scripting that validates onboarding data against UKG systems, enabling same-day account creation.

IT Helpdesk | MasTec Advanced Technologies

June 2022 - April 2025

- Managed Okta SSO and 2FA implementation for 200+ users, ensuring HIPAA and SOC2 compliance through robust security controls, audit logs, and reporting capabilities.
- Designed and executed bi-annual phishing simulation campaigns for entire organization, achieving 70% reduction in successful attacks through targeted end-user training programs.
- Created comprehensive device configuration documentation and security protocols, streamlining onboarding processes and improving user self-sufficiency.

Teaching Assistant | University of California, Davis

January 2022 - March 2022

- Mentored 60 students in Python programming fundamentals, including problem-solving techniques and algorithm design, using personalized instructional methods to enhance their understanding and skills.
- Formulated curriculum and supervised students during coding labs (5 hours/week), providing direct support and feedback on assignments, projects, and challenges to ensure hands-on learning and skill development.

PROJECTS

PhotoStream | Vite, React, Node.js, Express

- Built and deployed a full-stack web application through Vercel enabling 20+ users to reliably upload timestamped photos to user-assigned folders, providing seamless cloud storage.
- Integrated Dropbox API with scheduled hourly synchronization, verifying completeness of uploads and automatically routing files for QA/QC review.

2048 AI Game Solver | Python, NumPy, Jupyter Notebook

- Developed an AI solver for the 2048 game using ExpectiMax and Minimax with Alpha-Beta pruning to optimize move selection, achieving a 98% success rate.
- Designed multi-heuristic evaluation function combining empty space analysis, adjacency scoring, and monotonic patterns, improving game performance through weighted feature engineering.

Fashion-MNIST Classifier | Python, TensorFlow, Keras

- Trained and evaluated a neural network on 70,000 images across 10 classes, achieving 94% classification accuracy.