

Zakaria Al-Alie

Berkeley, CA • (510) 909-0553 • zakaria.al-alie@berkeley.edu • [LinkedIn](#) • [Portfolio](#) • [GitHub](#)

EDUCATION

University of California, Berkeley | Berkeley, CA

May 2028

B.A. in Data Science

Planned Relevant Courses: Foundation of Data Science, Program Structures, Data Structures, Calculus II, Multivariable Calculus

Merritt College | Oakland, CA

Dec. 2024

Dual Enrollment

Relevant Courses: Applications in Info Security, Secure Coding in JAVA and .NET, Python Application Programming, Introduction to Computer Programming, Introduction to Physics

AWARDS AND HONORS

Regents' and Chancellor's Scholarship

UC Berkeley's most prestigious merit-based award, granted to the top 1–2% of entering students for demonstrated creativity, leadership, service, and outstanding academic excellence.

Leaders for Tomorrow Scholarship

Selected as one of two recipients in my incoming UC Berkeley class to receive this national award, recognizing perseverance through adversity and exceptional leadership potential.

PROJECTS

xView2: Building Damage Assessment | PyTorch, OpenCV, CUDA, pandas

Apr. 2025

- Automated building damage assessment on **850K+ buildings** across **15 countries** using **PyTorch**
- Built **U-Net** for localization, **CNN** for four damage levels, (un-damaged, minor, major, damaged)
- Achieved **84.4% weighted F1 (92% undamaged, 72% destroyed)**
- Created **CUDA-accelerated inference** with **precision/recall** reporting and visualizations

BerkeleyBets | React, Express.js, scikit-learn

Jun. 2025

- Built **full-stack** sports analytics with 150+ NBA, NFL, MLB athletes with **React** (8 components, 4 pages) and **Express.js**
- Modeled **15K+ samples** from **1,419 player-seasons** using **position-specific Random Forest** with **temporal validation**
- Implemented **real-time player lookup** with **Fuse.js fuzzy search** and predictive analytics dashboard

Neuroimaging for Tumor Diagnosis | PyTorch, torchvision, scikit-learn

Jul. 2025

- Used **PyTorch ResNet-18 transfer learning** on MRI images, achieving **97.9% accuracy** across 4 tumor types
- Achieved **F1-scores of 96.5%-99.4%** across all categories (glioma, meningioma, pituitary, no_tumor)
- Implemented **data augmentation** with **rotation, flipping, and brightness adjustments** along with **learning rate scheduling** and **early stopping**

LEADERSHIP

Community Tutor and Volunteer | Oakland Islamic Center Mosque

Sep. 2020 - Present

- Mentored **100+ youth** in CS/Math coursework across **four local mosques** in Oakland
- Hosted community events and distributed **500+ plated meals** during Ramadan
- Organized **cleaning** and **restoration** efforts for mosque facilities

TECHNICAL SKILLS

Languages: Python, JavaScript, SQL, TypeScript

Technologies: PyTorch, TensorFlow, scikit-learn, Hugging Face, LangChain, React.js

Tools: CUDA, Docker, Git, Jupyter, NumPy, pandas