

Nimita Mishra

nimitamishra.dev | nimitamishra@berkeley.edu | LinkedIn | GitHub

EDUCATION

University of California, Berkeley

Berkeley, CA

Bachelor of Arts, Applied Mathematics

Est. May 2027

Relevant Coursework: Machine Learning and Data Analytics, Probability, Decision Analytics, Linear Programming and Network Flows, Numerical Analysis, Data Structures, Quantum Mechanics I-II

WORK EXPERIENCE

Trisetra | Early-stage startup building AI tools for editable 3D building models

Palo Alto, CA

Machine Learning Intern

May 2025 – Present

- Develop a computer vision and OCR pipeline for extracting walls, room boundaries, spatial relationships, and text labels from residential floor plans.
- Build preprocessing and geometric-analysis components to improve performance across noisy scans, rotated drawings, dashed lines, annotations, and varying architectural styles.
- Integrate structured floor-plan outputs into a broader workflow that converts 2D building information into editable 3D home models.
- Lead the redesign and implementation of Trisetra's product website in Next.js and React, translating the company's technical pipeline into clear product narratives, interactive demonstrations, and pricing flows.

AMD

Santa Clara, CA

Software Engineering Intern

May 2023 – Aug. 2023

- Designed and deployed a React.js dashboard for real-time hardware error-log visualization, reducing debugging time by 30%.
- Contributed to a computer vision pipeline for detecting missing capacitors on GPU boards using convolutional models trained on 10,000+ scanned images.

PROJECTS

Instagram Relationship Analyzer | Python, JSON/HTML, CSV, CLI

- Built a local CLI that parses official Instagram JSON and HTML exports and computes mutual and non-mutual relationship sets without login credentials or scraping.
- Added interaction-weighted review rankings and machine-readable JSON output, with unit tests covering export parsing, set analysis, and ranking behavior.

Daily Orbit: Local-First Project Intelligence System | Next.js, TypeScript, React

- Built a personal command center for capturing, prioritizing, and tracking technical projects, tasks, and ideas across human and AI collaborators.
- Implemented browser-local persistence, workspace indexing, structured milestone tracking, and project-readiness scoring based on completion and documentation quality.

Interactive Technical Portfolio & Generative Interfaces | Next.js, TypeScript, TouchDesigner, Vercel | In Progress

- Building a personal portfolio that presents technical work through interactive case studies, responsive visual storytelling, and custom cursor-reactive interfaces.
- Prototyping real-time generative systems in TouchDesigner using particle motion, feedback loops, and interactive inputs, then adapting selected visual behaviors for the web.

TECHNICAL SKILLS

Languages: Python, C++, C, Java, JavaScript, TypeScript, SQL, MATLAB, HTML/CSS

Libraries/Frameworks: Pandas, NumPy, Seaborn, Matplotlib, OpenCV, PyTorch, TensorFlow, React.js, Next.js, React Native, scikit-learn

Machine Learning: Computer Vision, OCR, Deep Learning, Contextual Bandits, Statistical Modeling

Tools: Git, UNIX/Linux, AWS, Vercel, TouchDesigner, Blender, Jupyter Notebook

Technical Areas: Machine Learning Systems, Reinforcement Learning, Optimization, Geometric Analysis, Interactive Computing