

Tanisha Patil

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EDUCATION

University of California, Berkeley

B.A. Computer Science and Data Science

Berkeley, CA

Anticipated Graduation: May 2028

Courses: Data Structures & Algorithms, Computer Programs, Object-Oriented Programming, Linear Algebra

SKILLS

- Programming: Python, Java, JavaScript, R, SQL, Bash, C/C++, HTML/CSS, TypeScript, REST APIs
- Data Science/Visualization: Pandas, NumPy, Matplotlib, Seaborn, Plotly, Tableau, Jupyter Notebooks
- Machine Learning/Modeling: PyTorch, Scikit-learn, TensorFlow, Keras, CNNs, NLP, Transfer Learning
- Cloud DevOps /Automation: AWS (EC2, RDS, S3, Route 53, Lambda), Terraform, Ansible, Docker, Kubernetes (basic), Nginx, CI/CD pipelines (GitHub Actions, GitLab), Git, REST API development
- Other Tools & Platforms: Linux/Unix command line, JSON/XML handling, Data scraping (Selenium)

PROFESSIONAL EXPERIENCE

Palo Alto Networks

Berkeley, CA

Analytics Engineer (Contract)

September 2025- Current

- Built Selenium web scraping pipelines and custom API endpoints to collect and normalize data from 50+ enterprise security and cloud platforms for automated sentiment analysis of product and market trends
- Developed a scalable data schema and integrated with dashboards reducing manual research time by 85%
- Implemented an LLM-powered reporting pipeline that generates synthesized summaries of sentiment and platform trends, providing concise, executive-ready insights for competitive intelligence and product strategy

Poway Unified School District

San Diego, CA

Software Engineer Intern

June 2024 - June 2025

- Engineered a cloud-based student desktop platform with AWS EC2 and RDS supporting 34,000+ accounts
- Automated multi-region EC2 & Route 53 setup with Terraform & Ansible, reducing server setup time by 40%
- Configured Nginx reverse proxies, containerized KASM workspaces via Docker, cutting connection errors 30%
- Built Python (Flask) backend services with IAM-controlled management for automated workspace assignment

WelliQ

San Diego, CA

Software Engineer Intern

June 2023- September 2023

- Built an NLP pipeline with a custom API endpoint to provide model predictions for the surveying platform
- Automated 2,000 test cases, cutting manual QA time by 70% and generating remediation for backend issues
- Managed survey data for 10,000+ records using SQL with PostgreSQL and MySQL, improving retrieval speed

PROJECTS

KASM Workspace Automation Platform | Flask, SQLAlchemy, Bcrypt, REST APIs:

- Built a secure Flask backend with SQLAlchemy and Bcrypt, enabling admin-controlled session management and automated workspace provisioning through REST APIs, reducing manual deployment time by **80%**
- Developed modular scripts for lifecycle management, improving multi-tenant scalability for cloud workspaces

Short-Term Solar Power Forecasting Using CNNs | PyTorch, VGG16_bn, Python:

- Published in the International Research Archive of Rising Scholars (2024), developed three CNN architectures, including transfer learning with VGG16_bn, achieving **87.6% accuracy** and **85.8% F1-score**
- Generated graphical analyses of model performance to illustrate trade-offs between complexity and training efficiency for real-time solar forecasting and grid integration; presented at **Inspirit AI Research Symposium**

Full-Stack Admin Dashboard | Flask, Bootstrap, SQLAlchemy, JavaScript:

- Developed Flask-Bootstrap platform for account management with a dashboard to support **200** live accounts
- Designed relational schemas, integrated SQLAlchemy ORM to support scalable, multi-user CRUD operations