Kelly Phan

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EDUCATION

University of California, Davis   SEPTEMBER 2021 - DECEMBER 2024
B.S. in Computer Science & Technology Management Minor

TECHNICAL SKILLS

- **Frontend:** React, Next.js, Redux, Tailwind CSS, HTML5, CSS3
- **Backend & Frameworks:** Flask, Express.js, Node.js, Prisma, Gunicorn
- **Databases & Storage:** PostgreSQL, MongoDB, Redis, AWS S3, RDS
- **DevOps & Infrastructure:** AWS (EC2, S3, RDS, API Gateway, Amplify), Docker, GitHub Actions, RQ Workers
- **AI & Data Tools:** OpenAI API, PyMuPDF, Qdrant, LangChain, scikit-learn, NumPy, Pandas, Power BI
- **Testing & QA:** Jest, React Testing Library, Puppeteer, Pytest, Selenium, axe-core, Lighthouse CI

EXPERIENCE

Homekey.casa — *Member of Technical Staff*   JANUARY 2025 - PRESENT
- Architected and launched the Homekey platform end-to-end, owning design across frontend, backend, database, and infra, and scaling the system to handle thousands of concurrent requests
- Improved API performance 3x by designing a service-oriented backend (Flask, 30+ MongoDB schemas, RQ workers, Redis caching, rate limiting) with memory-aware batching, streaming, and horizontal scaling
- Built AI-driven pipelines for document analysis and copilot workflows, leveraging concurrency, multithreading, and backpressure-controlled workers to optimize throughput, enrich metadata, and support multi-step diagnostics
- Delivered robust user-facing and storage systems with Next.js + Redux (hooks, long-polling, real-time updates), AWS S3 indexing with AI-powered metadata, and an email delivery system with 20+ automated templates

UC Agriculture and Natural Resources — *Website Student Assistant*   AUGUST 2024 - DECEMBER 2024
- Automated QA across 400+ Drupal sites with a Python crawler (XML sitemap parsing, lxml/BeautifulSoup, Selenium + axe), generating CSV reports that resolved 40+ Jira issues on accessibility and functionality
- Standardized documentation and training for 250+ site owners, including governance guides and live workshops, which reduced IT support load by ~30% and accelerated CMS adoption
- Bridged communication between IT and site owners, translating feedback into migration requirements and advising on UI/layout design for usability and sustainability

Codology — *Software Developer Intern*   MAY 2023 - AUGUST 2023
- Designed and deployed a CMS for course content (200+ videos, images, files), using MongoDB + Express to provide scalable, fault-tolerant file storage
- Implemented REST APIs with validation and support for varied video formats, ensuring platform stability across 4 courses and 20+ lessons, creating 4 new models and 12 endpoints

PROJECTS

Inventory Management Dashboard   SEPTEMBER 2024
- Built a full-stack inventory dashboard (Next.js + Redux, Flask/Prisma on AWS EC2/RDS/S3) for La Roche-Posay product tracking and management
- Designed PostgreSQL/Prisma schemas and dynamic routing to enable scalable CRUD with autogenerated product pages and efficient query structures
- Implemented state management, caching, and query batching to support real-time updates, product search, and interactive analytics dashboards with Tailwind UI components

Webtools for Alumni - *Project Manager & Front End Developer*   JANUARY 2024 - JUNE 2024
- Alumni intelligence platform: ingested 5,000+ LinkedIn records for the College of Engineering at UC Davis into MongoDB with Node.js/Express pipelines , ensuring compliance with LinkedIn's TOS
- Designed backend system with multiple REST APIs and modular endpoints to handle queries efficiently and support scalability with schema validation and compliance safeguards
- Built a React/Next.js search & indexing engine with keyword filtering and pagination; achieved 95% test coverage through 100+ Jest/RTL/Puppeteer tests in CI/CD for reliable releases