Curriculum Vitae

Alexandros 'Alé' Pouroullis

Contact Information:

⚲ Solihull, UK (Open to relocation across the UK)

☎ +44 7435 031043

✉ alexpouroullis@gmail.com

in LinkedIn

○ github.com/AlePouroullis

Summary:
Versatile software engineer who rapidly architects and delivers sophisticated full-stack systems. Built production environments from ground up, including a mobility platform providing both corporate transport solutions and digital payments for taxi commuters, reaching $1.2M annual revenue. Developed an innovative payment system that secured partnership and funding from Visa. Strong focus on scalable architecture and DevOps, implementing comprehensive cloud-native solutions on AWS. Demonstrated exceptional learning velocity, mastering iOS development to build a production-ready social app in 5 months, successfully published on the App Store. Experienced in leading technical teams in fast-paced startup environments.

1 Technical Skills

Languages: Python, TypeScript/JavaScript, Swift, Java, C++

   Frontend: SwiftUI, React, Next.js, HTML Canvas, AVFoundation

   Backend: Django, FastAPI, Express, Node.js, WebSocket, Celery

   Databases & Caching: PostgreSQL, MySQL, Redis, Firebase

   Cloud & DevOps: AWS (EC2, ECS, Aurora, S3, CloudFront, Rekognition), Terraform, Docker, CI/CD (GitHub Actions)

   Tools & APIs: OpenAI, Twilio, PayStack, WhatsApp Business API, Git

   Soft Skills: Technical Leadership, System Architecture, Fast Learning, Team Management, Problem-solving

2 Professional Experience

gather — AI Social Assistant   *Sole Developer*   August 2024 - January 2025
- Independently architected and developed full-stack social platform from concept to successful App Store launch in 5 months
- Built native iOS app in SwiftUI with real-time chat, push notifications, media sharing, and more [App Store Link]
- Engineered sophisticated backend using Django, PostgreSQL, Redis, and Celery workers for async task processing
- Implemented AI features including OpenAI-powered chat and AWS Rekognition for facial recognition
- Designed production infrastructure using Terraform with AWS ECS, Aurora, ElastiCache, and CloudFront CDN
- Set up comprehensive CI/CD pipeline with GitHub Actions, container registry, and automated deployments

   Loop   *Lead Developer, Chief Technology Officer*   September 2022 - July 2024
- Architected and built company's entire software ecosystem as founding engineer for a mobility platform reaching $1.2M annual revenue, serving both corporate staff transport and taxi commuter payments

- Developed innovative payment solution integrating WhatsApp Business API with PayStack that attracted partnership and funding from Visa
- Developed core booking platform with TypeScript/React frontend and Node.js/Express backend
- Established AWS cloud infrastructure, database architecture, and deployment pipelines
- Managed development team of 3, setting technical direction and mentoring junior developers

Elevat3d   *Cofounder and Lead Frontend Developer*   July 2022 - August 2024
- Led frontend development of mining analytics tool, reaching Y Combinator interview stage (top 7% globally)
- Implemented complex graphics processing system using HTML Canvas for blast analysis visualization
- Built responsive SPA in React with Redux for state management, integrated with ML-powered FastAPI backend
- Designed and implemented user authentication and file management system using Firebase services
- Collaborated closely with technical cofounder to integrate machine learning models with frontend

3 Education

Bachelor of Science in Computer Science   *December 2024*
University of Cape Town, South Africa   *Dean's Merit List, GPA: 77.55%*
- Relevant Coursework: Machine Learning, Artificial Intelligence, Robotics, Data Structures and Algorithms, Software Engineering
- **Final Year Project - SeaClear:** Built full-stack water quality monitoring system for Cape Town
    - Selected as top project among 8 groups for publication and presentation
    - Developed with Next.js frontend and Flask backend, using Docker Compose for deployment
    - Implemented WebSocket integration, MongoDB database, and Apache server configuration
    - Built comprehensive admin interface for content management and moderation

4 Research Experience

Automatic Damage Recovery in Hexapod Robots   July 2023 - Present

- Developed Python simulation framework using PyBullet physics engine to study robot damage adaptation
- Generated extensive datasets of robot walking behaviors on national supercomputer (CHPC)
- Implemented and tested SUPG controller for damage recovery in simulation environment
- Analyzed and visualized results to demonstrate effectiveness of adaptation strategies
- Work led to full paper acceptance at 2025 IEEE Symposium on Computational Intelligence in Artificial Life (IEEE CIALIC)

5 Competitions

FinHub Hackathon 2023: Blockchain for Sustainability   *1st Place*
Built full-stack voting platform using AlgoRand blockchain and Next.js, implementing smart contracts and secure vote verification. Project selected for further development funding and individual developer grant.

Loop Q Prize 2022   *4th Place*
Developed machine learning system for speech emotion recognition using CNN architecture and spectrogram analysis. Resulted in six-month research position offer.

6 Extracurricular Activities

- **Athletics:** Competitive gymnastics, marathon running, sport climbing
- **Community:** Hellenic Students' Association Cape Town - Event organization