

# Austin Pham

SOFTWARE ENGINEER · FULL-STACK DEVELOPER · AWS CERTIFIED

☎ (+61) 410-133-666 | ✉ contact@auspham.dev | 🏠 auspham.dev | 📱 pnt263

## Skills

### Certifications

AWS Certified Solution Architect Associate | AWS Certified Developer Associate | AWS Certified Cloud Practitioner

### Programming Languages

Java | TypeScript | JavaScript | Python | SQL | Bash | SCSS | CSS | HTML

### Frameworks/Libraries

Node | React | Redux | Next | Gatsby | Express | WebDriverIO | GraphQL

### Others

Google Cloud | AWS | Docker | CircleCI | Github Actions | Linux

## Experience

### NAB – Card Microservices Domain

Melbourne, VIC Australia

SOFTWARE ENGINEER

Feb. 2022 – Current

- Led the migration of 3 microservices from **ECS** to **Kubernetes** delivering a remarkable application performance boost of over 80% through the implementation of FluentD sidecar for streamlined log forwarding.
- Implemented event-driven listeners utilizing **Java**, **Kafka**, **AWS SDK** and **Spring Boot** to facilitate the streaming of millions of intercommunication messages among NAB's internal microservices to effectively process critical customer data.
- Developed a high-performance batch-processing microservice utilizing **Spring Batch**, seamlessly integrating with **S3**, **SQS**, and **SNS** to successfully process hundreds of thousands of customer data files daily, ensuring efficient and reliable data processing and delivery.
- Engineered fault-tolerant web clients REST API which communicated via **KongAPI** gateways using **Hystrix** circuit breaker, ensuring reliable and resilient communication between services in the event of network disruptions or failures.
- Initiated the implementation of Business-Driven Development (BDD) testing using **Cucumber** to minimise the technical gap of the business and development teams by providing a shared language and collaborative platform for effective communication and test automation.
- Developed **Boto3 Python** Lambda functions to automate job scheduling, efficiently processed millions of customer records daily and significantly lightened the workload of the main application.
- Coordinated production deployment with stakeholders, developers, and operations teams, actively resolved incidents and monitored platform health utilizing **Splunk**, **Jenkins**, **Confluent**, and **CloudWatch**.
- Proactively contributed to NAB's front-end inner-source framework using **React** and **SCSS** to power thousands of NAB front-end apps.

### Unihack

Melbourne, VIC Australia

FULL-STACK DEVELOPER (VOLUNTEER)

Oct. 2021 – Current

- Developed in-house Unihack web applications for over 200 participants using **Next**, **Typescript**, **Prisma** and **Blitz**.
- Managed logistics and provided technical mentorship on effectively identifying and targeting real-world problems, emphasizing the selection of suitable solutions within the given time constraints.

### Deloitte Digital

Melbourne, VIC Australia

VACATIONER INTERN CONSULTANT

Jan. 2021 – Feb. 2021

- Utilized a Test-Driven Development (TDD) approach to develop and enhance back-end REST APIs using **.NET 5 C#**, **XUnit**, **Moq** and **AWS Docker Lambda**.
- Collaborated closely with the AWS team on an open-source **AWS ECS Quickstart** project aimed at simplifying the deployment of Sitecore on **AWS ECS**.

## Projects & Hackathons

**Boxby** — 1ST OUT OF 30 TEAMS IN RMIT ITS HACKATHON 2019 — SPONSORED TO VISIT SILICON VALLEY VALUED \$18,000

📺 Video

- Designed, constructed, and deployed an offline IoT education solution leveraging **Node**, **Express** and **AFrame**.
- Integrated the system with offline services such as Khan Academy and NPM, enhancing the overall functionality and accessibility of the solution.

**Online compiler** — PERSONAL PROJECT

</> Live Demo

- Built a fully functional, real-time concurrent online compiler using **Web Socket** protocol from the ground up with **Monaco** text-editor engine.
- Developed a terminal environment simulation using **Xterm**, **Docker**, and **Bash**, integrating server-side rendering and state management through **Next** and **Redux**.
- Developed an input algorithm for client rendering that effectively eliminated all latency when processing requests for standard input.

**Pathfinder Visualiser** — PERSONAL PROJECT

</> Live Demo

- Developed a peer-to-peer path-finding visualiser using vanilla **Typescript**, **p5**, **HTML**, **CSS**, and **WebRTC** without using relay server.
- Developed an on-screen frame buffer rendering algorithm that optimise infinite map navigation.
- Designed a mathematical formula to simulate real-time mouse movement which reduced events throughput by 99%.
- Developed a math-based zoom algorithm for seamless point-to-point zooming while maintaining accurate ratios.

## Education

### RMIT University

Melbourne, VIC Australia

BACHELOR OF COMPUTER SCIENCE

Jul. 2018 - Jul. 2021

- **GPA 3.9/4.0**
- **Vice-Chancellor's Award**
- **School Of Computing's nominee for JN McNicol Prize 2022**