

Anh Nguyen

0422504968 | avdn.dev@outlook.com | 4nhus.github.io/portfolio | github.com/4nhus | linkedin.com/in/avdn

TECHNICAL SKILLS

Languages	Swift, Java, Kotlin, Javascript, HTML, CSS, SQL
Frameworks and libraries	SwiftUI, CoreMotion, AVFoundation, Watch Connectivity, SwiftData, Spring Boot, JUnit, React, Tailwind
Development tools	Xcode, IntelliJ IDEA, Visual Studio Code, Git, Cocoapods, Bitrise, npm, Gradle, Confluence, Figma

EXPERIENCE

Associate Software Engineer | Nine September 2024 - Present

Within a month of joining:

- Decreased build time of Apple Watch app from 5 minutes to 10 seconds, and halved run time of native unit tests in CI/CD pipelines
- Proposed and implemented a decrease in the minimum deployment target of Apple Watch app, increasing potential user adoption by 10%
- Improved development and code review efficiency by enabling Swift file formatting and linting in commit-hooks and as a pipeline step
- Increased output of team 33% by sharing iOS knowledge through documentation and pair-programming
- Completed crucial audio selection and output, and iPhone connectivity and syncing features in Apple Watch radio-streaming app

Android Software Engineer Intern | TikTok April 2024 - August 2024

- Optimised the presentation of revenue-generating livestream features by conducting feature engineering for cloud AI models
- Added observability to a previously unmonitored crucial revenue-generating campaign by implementing event-tracking
- Increased automatic bug-finding rate by 200% in live-streaming business features by writing UI automation tests
- Wrote guides and documentation to improve the onboarding process for new joiners

Casual Academic | University of New South Wales September 2023 - August 2024

- Tutored 200+ students in The Art of Software Design (Object Oriented Design & Programming) and Algorithms and Programming Techniques
- Taught software design principles/patterns and refactoring techniques by incorporating core Java concepts, e.g. OOP
- Taught problem-solving paradigms, e.g. Dynamic Programming) and time complexity analysis for designing, justifying, and analysing algorithms
- Uplifted assignment specifications documents; applied and distributed changes to 500+ students via Git
- Demonstrated effective teaching with an overall student rating of 5.86/6 over the faculty average of 5.36/6 on a 6-point Likert scale

PROJECTS

BackBuddy | Swift | SwiftUI, SwiftData, CoreMotion, AVFoundation <https://devpost.com/software/back-buddy>

Single-handedly came 2nd in the 2024 UNSW CSESoc x DevSoc Flagship Hackathon against 58 other teams with 3-5 members

- Created a native iOS app that monitors users' posture with their AirPods Pro/Max and sends them haptic notifications when they slouch
- Completed the entire product development cycle in under 48 hours, including ideation, prototyping, design, and development

Eye Empathise | Swift | SwiftUI, AVFoundation, CoreImage github.com/4nhus/eye-empathise

Won Apple's 2024 Swift Student Challenge

- Simulated visual impairments such as colour blindness in a native iOS application by leveraging AVFoundation and CoreImage to manipulate image data from a live camera feed and generated assets
- Constructed 10+ screens in SwiftUI; ensured accessibility with Apple's Accessibility API

Portfolio | JavaScript, GLSL, HTML, CSS | React, WebGL2, Tailwind, Github Actions 4nhus.github.io/portfolio | github.com/4nhus/portfolio

- Designed a single-page React web application with responsive layouts and interactivity to serve as a portfolio
- Implemented interactive Perlin noise shader in GLSL through WebGL2; applied style and interactions to React components with Tailwind
- Enabled navigation between pages without reloading the site by handling routes with React Router
- Managed package dependencies with npm; built project with Vite, automatically deploying it via Github Actions

E-Invoicing Service | Java, JavaScript, HTML, CSS | Spring Boot, Spring Data, Spring Security, JUnit, Gradle, React, Tailwind, npm, Vite

- Developed a full-stack application that offers e-invoice creation, conversion, validation, and sending
- Established RESTful backend and web frontend with Spring Boot and React; built and tested server using Gradle and JUnit
- Enacted OWASP best practices in authentication and authorisation through Spring Security
- Containerised both frontend and backend using Docker

EDUCATION

Bachelor of Science (Computer Science) | University of New South Wales | 83.2 WAM

EXTRACURRICULAR

- 2024 UNSW CSESoc x DevSoc Flagship Hackathon Winner, Swift Student Challenge Winner, Unihack Hackathon
- 2023 UNSW ICPC Event Coordinator
- 2022 UNSW CSESoc Student Experience Subcommittee
- 2017 Salvation Army Donation Drive, Red Nose Day Donation Drive, Sir Roden and Lady Cutler Foundation Donation Drive