

Anh Nguyen

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EDUCATION

Bachelor of Science (Computer Science) | University of New South Wales | 83.7 WAM

2022 - 2024

EXPERIENCE

Android Software Engineer Intern | TikTok

March 2024 - Present

- Conducted feature engineering on Android client for cloud AI models that optimised the presentation order of live-streaming revenue features
- Implemented event tracking for crucial revenue generating campaign, adding observability to previously un-monitored system
- Wrote UI automation tests for live-streaming business features, increasing automatic bug recall rate by 200%
- Improved on-boarding process for new joiners by writing guides and documentation

Casual Academic | University of New South Wales

Sep 2023 - Present

- Tutored 60+ students per week in COMP2511 The Art of Software Design (Object Oriented Design & Programming) and COMP3121 Algorithms and Programming Techniques
- Incorporated JUnit, Gradle, and core Java features/frameworks, e.g. OOP, inheritance, collections, exceptions, packages, concurrency, and generics, to teach design principles/patterns/smells and refactoring techniques
- Taught problem solving paradigms (Divide and Conquer, Greedy Algorithms, Flow Networks, Dynamic Programming) and Big-O time complexity analysis for designing, justifying, and analysing algorithms
- Proposed improvements to assignment specifications document; implemented and distributed changes to 500+ students via Git and Gitlab
- Demonstrated effective teaching with an overall student rating of 5.86/6 over faculty average of 5.36/6 on a 6 point Likert scale

PROJECTS

BackBuddy | Swift | SwiftUI, SwiftData, CoreMotion, ActivityKit, AVFoundation

devpost.com/software/back-buddy

Achieved 2nd place in the UNSW CSESoc x DevSoc Flagship Hackathon as the only solo team against 58 other teams with 3-5 members

- Utilised multiple Apple platform frameworks to create 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 the 2024 Swift Student Challenge, for which Apple provided an exclusive invitation to demo both Eye Empathise and BackBuddy

- Devised a native iOS application to simulate visual impairments, through camera filters and guided exercises, to foster empathy of visual disabilities; translated domain knowledge into actionable copy on accessibility for visual disabilities
- Designed 10+ screens with modular views and view modifiers in SwiftUI; ensured accessible user interactions with Apple's Accessibility API
- Leveraged AVFoundation and CoreImage frameworks to manipulate image data from a live camera feed and generated assets, for simulation of conditions such as glaucoma, colour blindness

Portfolio | Javascript, HTML, CSS | React.js, Tailwind CSS, npm, Vite, Github Actions

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- Produced a single page web application with responsive layouts and interactivity to serve as a portfolio
- Constructed React components to compose UI; applied styling and interactions to components with Tailwind CSS
- Handled routes with React Router to enable navigation between pages without reloading site
- Managed package dependencies with npm; built project with Vite before it was deployed via Github Actions

Android Apps | Kotlin | AndroidX, Jetpack Compose, SQLite, MediaStore, Gradle

github.com/4nhus/android-development

- Completed numerous Android projects to achieve a JetBrains Academy Android Developer certificate, including a music player, image editor, and bank account management app
- Used coroutines to ensure responsive UI during image processing in photo editor app
- Implemented MVVM in multiscreen, stateful music player and bank account management apps

TECHNICAL SKILLS

Languages Swift, Java, Kotlin, Javascript, HTML, CSS, SQL

Frameworks and libraries SwiftUI, SwiftData, CoreMotion, CoreData, CoreImage, AVFoundation, XCTest, Jetpack Compose, React.js

Development tools Xcode, Android Studio, IntelliJ IDEA, Webstorm, Git, npm, Gradle, Confluence, Figma

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