Anh Nguyen

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EDUCATION

Bachelor of Science (Computer Science) │ University of New South Wales │ 83.7 WAM   2022 - 2024

EXPERIENCE

Casual Academic │ University of New South Wales   Sep 2023 - Present
- Tutored 60+ students per week in COMP2511 The Art of Software Design (OO Design & Programming) and COMP3121 Algorithms and Programming Techniques
- Used 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 creating, justifying, and analysing algorithms
- Used Git and Gitlab to edit, then distribute assignment specifications to 500+ students
- Overall teaching was rated at 5.6/6 on a 6 point Likert scale, beating the faculty average of 5.3

Report Writer, Editor and Draftsman │ QOVES   May 2020 - Feb 2021
- Wrote 60+ page-long aesthetic medicine consulting reports commissioned by 40+ clients
- Constructed 5-15 cephalometric diagrams and 1-2 facial morphs per report using Bluebeam Revu and Adobe Photoshop
- Trained less experienced team members on constructing cephalometric diagrams and facial morphs, and edited their reports

PROJECTS

Portfolio │ Javascript, HTML, CSS │ React.js, Tailwind CSS, npm, Vite, Github Actions   Live Site | Github
- Developed a single page web application with responsive layouts and interactivity to serve as a portfolio
- Created React components to compose UI, and applied styling to and created interactions on them with Tailwind CSS
- Handled routes with React Router to enable navigation between pages without reloading the website
- Managed package dependencies with npm, and built the project with Vite before it was deployed via Github Actions

Accounting Service │ Java, SQL │ Spring Boot, Spring Web, Spring Data, Spring Security, JUnit, Gradle   Github
- Used Spring Boot to develop a backend for an accounting service that offers user management and payroll processing, and built and tested the system using Gradle and JUnit/Mockito respectively
- Implemented RESTful APIs using Spring Web, and reduced boilerplate code with Project Lombok
- Configured authentication and authorisation through Spring Security, and added event logging to monitor system security
- Applied Spring Validation and Jackson to ensure integrity of data models, then encode them as JSON

Journey Genie │ Swift, Python │ SwiftUI, MapKit, Flask   Github
- Utilised OpenAI API and Visual Crossing Weather API on Flask backend to create itineraries adjusted for real-time weather
- Collaborated within a team of 4 to ideate and prototype the project concept, and to develop the backend
- Developed a native iOS app to interact with the backend, and composed the UI with SwiftUI and MapKit

Eye Empathise │ Swift │ SwiftUI, AVFoundation, CoreImage   Github
- Developed a native iOS app to simulate various visual disabilities using the device camera and guided exercises, for an immersive experience to foster empathy of visual disabilities.
- Used SwiftUI to compose 10+ app screens with modular views and view modifiers
- Leveraged the 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
- Ensured accessible user interactions with Apple's Accessibility API

SKILLS

Languages	Swift, Java, Javascript, HTML, CSS, SQL, C++
Frameworks and libraries	SwiftUI, SwiftData, Spring Boot, Spring Data, Spring Security, JUnit, React.js, Tailwind CSS
Development tools	IntelliJ IDEA, Xcode, Webstorm, Git, Github, npm, Gradle, Confluence, Figma

COMPETITIONS, AWARDS, & VOLUNTEERING

2024	L'Oréal Brandstorm	2024	Unihack Hackathon
2024	Swift Student Challenge	2023	UNSW ICPC Event Coordinator
2022	Student Experience Subcommittee CSESoc UNSW	2018	St. Leo's College Academic Award