MANHUA LU

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EDUCATION

Bachelor of Computer Science and Commerce, University of New South Wales 2021 - 2024
(Distinction WAM, Scholarship recipient for the Academic Achievement Awards)

Relevant Coursework: Algorithms and Programming Techniques, Data Structures and Algorithms, Database Systems, Object-Oriented Design and Programming, Software Construction: Techniques and Tools

Awards: UNSW WIT Hackathon 2023 2nd Place, USYD SYNCS Hackathon 2023 Best Social Impact Award, UNSW CSESoc Hackathon 2023 Top 5

SKILLS

Technical Skills   React, TypeScript, JavaScript, Python, Java, C, MIPS Assembly, Bash, Flask, Git, CSS, HTML, React MUI, TailwindCSS, Radix UI, Nest.js, Next,js, SQL, PostgreSQL, Psycopg2

PROJECTS

Notangles. — TypeScript, React, HTML, CSS, Express.js, Node.js, Nest.js
As a part of UNSW CSESoc Projects, developed a web application with a drag-and-drop interface for students to plan their timetables. Personally implemented functionality to drag-and-drop custom-user events. (Try it here)

Student Markbook. — TypeScript, React, Next.js, Nest.js, PostgreSQL, Prisma, TailwindCSS, Radix UI
A web application that allows me to create classes to store my students' exam marks, calculate averages and view progress. Created Figma designs for the pages. Designed the relational ER schema.

Porfolio Website. — Next.js, TailwindCSS, Radix UI
A deployed website that shows the personal projects I've worked on and tells the user more about myself.
(Try it here)

Modern DungeonMania. — Java, JUnit
Built the backend of a web application. Produced UML Diagrams and applied software design principles/patterns. Adapted and synthesised to changes in requirements.

EXTRA-CURRICULAR ACTIVITIES

- **UNSW CSESoc Projects Director.** Jan 2023 – Present
  Led a team of 9 to continuously improve and deploy new features for Notangles. Utilise Jira, Confluence and review Github pull requests. Attend weekly meetings and standups.

- **UNSW CompClub Mentor.** May 2022 – Present
  Held free workshops that taught a class of 27 students of years 7 to 12 Python, Web Development and Shell. Promoted computing to younger generation by creating a fun and collaborative environment.

- **UNSW CSESoc Peer Mentor.** Feb 2022 – May 2022
  Led weekly meetups to help a group of 8 first year students transition to university in their first semester. Communicated with mentees one-on-one to ensure they feel happy and safe.

WORK EXPERIENCE

CSE Casual Academic   Feb 2023 – Present
UNSW   *Kensington, NSW*

- Taught university students PLpgSQL, psycopg2, Relational Modelling, Transaction Schedules, Serialisability and Normalisation for the COMP3311 course (Database Systems).

- Answered questions and debugged students' code in computer lab sessions of around 30 students for the COMP2041 course (Software Construction: Techniques and Tools).