Nancy He

+61 404969972 | hanghur@gmail.com | wakatime.com/@jwhhh | github.com/jwhhh | linkedin.com/in/jwhhh

EXPERIENCE

Research Software Engineer (Python), *Australian National University* Sept 2021 - Ongoing
- Designed, developed and documented CoFI (Common Framework for Inference), a pure Python package that links scientific inference problems to a diverse range of solving tools for accessible experimentation and education, as the lead software engineer in a multidisciplinary team
- Designed, developed and documented Espresso (Earth Science Problems for the Evaluation of Strategies, Solvers and Optimizers), a scientific platform that collects, automates and packages cross-language geoscientific inference problems into a single Python package, as the lead software engineer in a multidisciplinary team
- Designed, developed and documented BayesBay, a Python/Cython mathematical package that provides generalised and optimised Bayesian sampling capabilities, as the lead software engineer in a multidisciplinary team
- Developed the team websites (InLab) and maintained Docker containers
- Liaised with a range of stakeholders in academia and industry to understand end-user requirements, present software mentioned above and support collaboration opportunities

Graduate Software Engineer (Java, PostgreSQL), *Instaclustr* Aug 2021 - Sept 2021
- Ensured the reliability and high availability of PostgreSQL data on complex cloud infrastructure
- Operated on a company-level database for providing new services and cloud nodes to users

Full Stack Developer (JavaScript), *WebUMate* Mar 2021 - May 2021
- Developed a mobile application to coordinate the delivery of aged care services (JavaScript, HTML, CSS, WeChat cloud), as the lead software engineer in a two-person team
- Developed a questionnaire website that follows mental health concerns among university students (Angular, TypeScript, Koa Node.js, AWS), as the lead software engineer in a two-person team
- Developed an online marketplace and bulletin board as a mobile application (Taro, React.js, JavaScript, WeChat cloud) as the lead software engineer in a two-person team

SIDE PROJECTS

Steering Committee Member, *AuScope M@te* Aug 2023 - Ongoing
- Attended steering committee meetings, suggested and supported crucial decisions from the technical aspects

Android Software Engineer (Kotlin, SQLite), *the Nasio Trust* Jan 2022 - Ongoing
- Developed Collectous, an offline data collection Android application integrated with Google Spreadsheets as a database to be used in the health and agricultural settings in Kenya, as the lead software engineer

Website Developer (Wix), *Australian China Alumni Association* Apr 2021 - Ongoing
- Designed and developed the main website as the lead developer

Coach (Python, Django), *Django Girls* Aug 2023 - Aug 2023
- Provided one-on-one Django blog website tutoring to girls with diverse technical backgrounds

Team Leader and Software Engineer (Hugo; Python), *Asian Women Development Plan* Aug 2022 - Jun 2023
- Designed and developed the main website (Hugo, GitHub Pages, GitHub Actions)
- Provided IT support to the NGO, including automating the volunteer management system and developing a recruitment system
- Led and trained the IT support team of 6 volunteers

EDUCATION

Bachelor of Information Technology (Honours), *Australian National University* Jan 2021
- First Class Honours; Major in Intelligent Systems; Minor in Mathematics

SKILLS

Programming & Platforms	Python, Java, JavaScript (Angular, Koa), Kotlin, SQL, HTML/CSS, OCaml; Hugo, Wix
Databases & Cloud Services	PostgreSQL, SQLite, Azure Database Administration; Basic knowledge of Azure, AWS
DevOps	Experience with CI/CD, Docker, and GitHub Actions.
Project Management	Experience leading software development teams and projects

CERTIFICATES

Azure Database Administrator Associate, *Microsoft* Sept 2023
Azure Fundamentals, *Microsoft* Nov 2023