

XIU HONG KOOI - SOFTWARE ENGINEER

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EDUCATION

University of Cambridge, MPhil Advanced Computer Science **Oct 2020 - Jul 2021**

- Modules in Advanced CS topics such as Advanced Operating Systems, Multicore Semantics, Algebraic Path Problems, Interactive Proofs and Mobile Data Machine Learning.
- Research in Programming Languages Type Systems

University of Newcastle-upon-Tyne, BSc Computer Science **Sept 2016 - June 2019**

- 83% First-Class Honours
- 2x British Computing Society Academic Awards, Endowed prize 2017.
- Highest grade in class of 2019.

EXPERIENCE

Software Engineer, AirAsia **Aug 2019 - Aug 2020**

- Led and orchestrated the development of our new online checkout, booking system and customer support chatbot by implementing core features and coordinating release.
- Took ownership of codebases, development and deployment stages by ensuring clean code and comprehensive testing.
- Improved the teams' software engineering process by enforcing best practices such as automation, strict code reviews, in-depth documentation and git branching strategies.

Data Engineer Intern, Keysight Technologies **June 2018 - Sept 2018**

- Modernised our data infrastructure by migrating the existing tech stack to modern big data technologies.
- Extended a legacy proprietary Java based parser that writes data to a relational database in order to switch to a NoSQL design.
- Contributed to the team going forward by providing valuable development work and insights through presentations and suggestions.

TECHNICAL SKILLS

- Backend Web Development using Java Spring Boot, Python Flask and ExpressJS
- Data Structures and Algorithms
- Cloud Technologies, Kubernetes, Docker and DevOps, 1x Google Cloud Certified
- Git, CI/CD pipelines using GitLab CI, CircleCI and QA Automation
- RDBMS, NoSQL and in-memory databases like MySQL, MongoDB, Firestore and Redis

PROJECTS

Genid - GoLang and Redis based CLI universally random ID generator that generates random numeric or alphanumeric ids and ensures no collision.

Home Automation System – A REST API written in JavaScript and uses MongoDB that controls smart home appliances like light bulbs and wall outlets.

Term Rewriting System – My undergraduate dissertation involving term rewriting systems that was written in Java and Swing GUI.

NE Weather – A weather app that gives user activities suggestions based on the weather condition and air quality for Android written using the Native Java Android SDK. I led a team of developers to develop this app as part of our undergraduate team project.

QcK Budget – An iOS budget tracking app built using Xamarin.iOS initially then migrated to Ionic that lets users log their income and expenses easily. Users can set recurring transactions and scan barcodes to quickly get the price of an item.

Anomify.com – An anonymous messaging website developed in PHP and MySQL that lets users send and receive anonymous messages from each other. It was one of my earliest projects where I was introduced to web development.