

Renlord Yang

<https://renlord.com>

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Mobile : On Request

EDUCATION

- **University of Melbourne** Melbourne, VIC, AU
Doctor of Philosophy in Software Engineering Mar 2017 — June 2021 (Expected)
- **University of Melbourne** Melbourne, VIC, AU
Master of Science in Computer Science w. Distinction July. 2014 — Dec. 2016
- **ETH Zurich** Zurich, CH
Master of Science (Exchange Program) Sep. 2015 — Mar. 2016

WORK EXPERIENCE

- **University of Melbourne** Melbourne, VIC, AU
Teaching Assistant & PhD Candidate Mar. 2017 — Now
 - **Taught Coursework Subjects: (Graduate-level)** Software Testing, Cryptography and Security, Internet Technologies; **(Undergraduate-level)** Computer Systems
- **Medipass** Melbourne, VIC, AU
Software Engineer Jan 2017 – Dec 2018
 - **Transaction Risk Analysis Engine:** Built and maintained a rule-based transaction risk analysis engine. Enabled real-time fraud detection by downstream clients.
 - **Outbound Email Service:** Implemented strict DMARC rules and properly setup SPF and DKIM on our self-hosted email servers. No more phishing emails.
 - **Inhouse Analytics:** Set up and maintained an self-hosted inhouse analytics server — Metabase for business analytics. Inhouse business team can analyse usage in real-time.
 - **Automated Blue/Green Deployment and Containerization:** Setup and maintained the blue/green development environment and prototyped deployment strategies for production. No more downtime during deployment. All services containerized with templated setups, no deployment hiccups forever.
- **Odecee/Cognizant Australia** Melbourne, VIC, AU
Associate Software Engineer July 2016 — Dec 2016
 - **Devops Practice:** Implemented new deployment strategies and parallised testing. Improved testing times by at least 50% and improved developers' productivity.
 - **AWS Infrastructure as Code Setup:** Fast deployment and provisioning of AWS infrastructure using AWS cloudformation. Handsoff deployment and supports horizontal scaling. No stress deployment.

OPEN SOURCE

- **Graphene OS:** Regular contributor at GrapheneOS. The mobile OS is a privacy and security focused mobile OS with Android app compatibility developed as a non-profit open source project.

PROJECTS

- **Biternet:** <https://github.com/renlord/biternet> Pay using Bitcoin micropayments for each byte your relay across mesh network.
- **Bitcoin Micropayment Channels Library:** <https://github.com/renlord/btc-micropayment-channels> JS-implementation of Spillman-style Micropayment Channels.
- **Home Cloud:** <https://github.com/renlord/homecloud> Production-grade cloud services at home. 99% uptime setup with code.
- **Katmail:** <https://github.com/katmail-xyz/mail.katmail.xyz> Self-hosted email service with strict and state of the art IETF spec-compliant security setup. Checkout my mail server at the internet.nl email server hall of fame.

PROGRAMMING-SPECIFIC SKILLS

- **Programming Languages:** C, C++, Rust, Python, Javascript, Go, Java, Kotlin, Bash
- **Cloud Orchestration, Devops Tools:** Docker, buildah, podman, Docker Swarm, Kubernetes, Terraform, Vagrant, Ansible, Openstack, AWS, GCP
- **Tools:** Git, Subversion, GNU Binutils, BPF Compiler Collection, perf, strace, systemtap, lttng