

# KENNETH SIM JIAN HUI

[kensim.work@gmail.com](mailto:kensim.work@gmail.com) • +65 8228 8572 • [kensim.dev](https://kensim.dev) • [linkedin.com/in/kensimjh](https://linkedin.com/in/kensimjh)

Software Engineer with 2 years of professional experience working on Python backend and AWS Cloud. Handled production systems with SDLC experience. Works on several side projects in free time.

## SKILLS & CERTIFICATIONS

---

- AWS Certified Solutions Architect – Professional certification, Certified Ethical Hacker (CEHv10) certification
- Programming Languages: Python, SQL, Javascript, Bash, HTML/CSS, Solidity, Java, C, C#
- Frameworks & Databases: Django, Flask, Vue.js, Android, Unity, .net, MySQL, PostgreSQL, DynamoDB
- Tools: Docker, Git, Linux, AWS (API Gateway, CF, CodeBuild/CodePipeline/CodeCommit, DynamoDB, EC2, ECS, Lambda, RDS, S3, Step Functions)

## EXPERIENCE

---

### Software Engineer (Associate Cybersecurity Specialist), GovTech Singapore

Apr 2021 – Now

- Lead software engineer and architect in an inter-government agency Agile team to develop a phishing website hunting web application
- Solely responsible for designing a scalable system on AWS Lambda, Step Functions, DynamoDB, Cognito, SQS, ECS and S3 with the ability to scan and categorize 100k+ websites a day
- Developed a separate Django web application to aid in the monitoring and response of cybersecurity attacks of 5k+ websites piping into the Incidence Response team's SIEM workflow
- Created a scalable custom website defacement scanning algorithm to detect and protect government websites, scanning a single site in 10 seconds using Python, built on AWS Lambda, Step Functions and S3
- Created multiple custom automation scripts/environments increasing team's development velocity i.e. docker-compose, pre-commit unit testing and linting, custom Lambda hot-reloading solution and code templates

### Associate Software Engineer, Cynopsis Solutions Pte. Ltd.

Sep 2020 – Apr 2021

- Lead backend engineer on a Know Your Customer (KYC) SAAS built on Django, Celery, and Docker on ECS, used by major banks, e-commerce, and cryptocurrency companies
- Personally worked with more than 10 clients from major financial institutions to plan and develop customized features of SAAS, some deals worth SGD\$100k+
- Studied different clients' network and security needs and modifying SAAS so that it meets their specifications when deploying to clients' local servers or cloud environments via AWS CloudFormation CDK
- Maintained AWS infrastructure for running of business operations serving over 200 concurrent clients

## RELEVANT PROJECTS

---

### Tech Mentor, SAGE – [sagexperiences.com](https://sagexperiences.com)

Aug 2021 – Now

- Mentored a student startup based in my alma mater that is building a web application to be used for professional networking
- Guided tech team on scaling up the MVP from a Telegram bot, to be a scalable serverless production ready system application built on React, Firebase, and MongoDB
- Stood in as Tech Lead for 2 months while the team was undergoing transition, managing project direction and task allocation
- While as Tech Lead, took part and became a finalist in Create4Good Challenge 2021

### Co-Founder/Developer, Kitty Party – [kittyparty.finance](https://kittyparty.finance)

Apr 2021 – Now

- Co-founded and Developed a DAO DeFi project using NFTs as a governance token, built on both the Ethereum and Polygon blockchains to provide a decentralized ROSCA system
- Wrote the Smart Contracts in Solidity, interfacing with Chainlink for ROSCA randomization, and Uniswap for liquidity pool staking
- Created the NFT image generation script using OpenCV in Python
- Winner of the Polygon Runner Up Prize in Chainlink Virtual Hackathon Spring 2021
- Assisted in talks with Polygon and Chainlink, successfully gaining USD\$10k project funding

### Software Lead, The Cog Effect – [capstone2020.sutd.edu.sg](https://capstone2020.sutd.edu.sg)

Jan 2020 – Aug 2020

- Led a team of software engineers in developing a gamified cognitive rehabilitation platform

- Coordinated and architected a multi-platform project consisting of a Unity iOS app, Vue.js web app, Arduino + Bluetooth hardware, Flask backend and PostgreSQL database
- Single-handedly created the web application, backend, and Arduino portions of the application as well as handled GCP deployment

## EDUCATION

---

### **Singapore University of Technology and Design**

**May 2017 – Sep 2020**

- Bachelor of Engineering (Information Systems Technology and Design), Honours with Distinction
- SBF Foundation-SUTD Scholar - awarded to 4 students a year
- Specialization Track: Cybersecurity

### **ZheJiang University (Overseas Exchange)**

**May 2017 – Sep 2020**

- KKH Global Exchange Award recipient
- Asian Leadership Programme sponsorship recipient – awarded to only 10% of the cohort a year
- Led a team of 5 students to create a facial and emotional recognition Augmented Reality application for the Microsoft HoloLens using Azure and Unity