Melodies Sim

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ABOUT ME

Highly motivated and passionate to build amazing products. I'm a self-driven and independent learner who is comfortable working in a diverse cross-functional teams. In my free time, I enjoy building side projects to learn new skills and technologies.

EDUCATION

NATIONAL UNIVERSITY OF SINGAPORE
Computer Science
Aug 2017 - Present

RAFFLES INSTITUTION
Jan 2015 - Dec 2017
A Levels: AAAA/A
H2: Math, Physics, Chemistry, Economics | H1: General Paper

CONTACT

Github:// https://github.com/Happytreat
LinkedIn:// http://gg.gg/LinkedInMelodies

COURSEWORK

UNDERGRADUATE
Software Product Engineering for Digital Markets
Design and Analysis of Algorithms
Parallel and Distributed Algorithms

SKILLS

PROGRAMMING
Languages: Go, Python, Java, TypeScript, Javascript, Swift
Frameworks: iOS, React, AWS Serverless Framework, GraphQL
Others: Continuous Integration Delivery, Git, TDD, Scripting

AWARDS

2019   AngelHack AWS Challenge Winner
2019   National Blockchain Challenge Second Place
2017   NUS Global Merit Scholarship
2015   Lee Kuan Yew Math and Science Award
2014   Singapore Mathematics Olympiad Gold

EXPERIENCE

SHOPEE SINGAPORE | Software Engineer Intern
Dec 2020 - Apr 2021
- Worked on the core Memcached cluster High Availability (HA) solution.
- Researched and conducted vigorous performance and functional tests for 4 potential Memcached HA architectures.
- Developed and deployed Memcached server-side and client-side benchmark tools used in investigation of live Memcached incidents.

FACEBOOK SINGAPORE | Software Engineer Intern
May 2020 - Aug 2020

- Rolled out an encryption module into production for an internal tool, providing end-to-end encryption within an existing codebase.
- Drove collaboration and proactively seek to align business requirements to build a new User Interface to optimise the way clients can find information and overall user experience.

HODLNAUT | Full-stack Software Engineer Intern
SEA First Crypto-Bank | May 2019 - Aug 2019

- Conceptualised, designed and implemented the Know Your Customer (KYC) System, integrating with a third party SaaS.
- Developed APIs and UI features for Beta launch using React, NodeJS, ExpressJS stack.

TEACHING COURSES
CS2103 Software Engineering Module | Jan 2019 – May 2019
CS2040S Algorithms and Data Structures | Jan 2020 – May 2020

PROJECTS

UPLAN | Visual University Module Planner WebApp
In Progress | https://github.com/Happytreat/UPlan2.0
- UPlan aims to allow students to make organised and informed college decisions.
- Features drag and drop, tagging of modules based on college requirements.
- Built with React. Backend is deployed using the AWS Serverless Framework.

PATRONAGE COLLECTIBLES
Decentralised Crowdfunding Platform With Harberger Crypto-Collectibles
https://devpost.com/software/patronage-collectibles
- Won the National Blockchain Challenge Vertical Prize 2019.
- Aims to solve the problem of traditional crowdfunding: lack of personal touch. Instead patrons buy unique Crypto-Collectibles to support creators. The Harberger tax on collectibles ensures a regular pledges for creators.
- Integrated the UI with smart contracts using Drizzle-React and worked with smart contracts using Truffle.

EXTRACURRICULAR

GOOGLE DEVELOPER STUDENT CLUB | HEAD OF TECHNOLOGY
Sept 2019 - June 2020

- Head of Technology of the first ever Google DSC Core Team in the National University of Singapore. Conceptualise events such as the 9 workshops that DSC Tech is holding, and a Virtual Hack-for-Good and worked with a cross-functional team bring these events to life.