

Blake Tan Ting Yu

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EDUCATION

National University Of Singapore (NUS)

Bachelor of Computing in Computer Science (Honours with Merit)

Aug. 2020 – Dec. 2023

- *Relevant Coursework:* Programming Methodology, Object Oriented Programming, Data Structures and Algorithms, Database Systems, Software Engineering Principles and Patterns, Software Engineering Project, Operating Systems, Computer Networks & Big Data Systems

Temasek Polytechnic

Diploma in Digital Forensics with Merit (Bronze Medalist)

Apr. 2015 – May 2018

- Graduating GPA: 3.83/4.00, 6 Distinctions
- Centre for Strategic Infocomm Technologies (CSIT) Scholarship (2015 - 2018) and Director's List for 4 semesters
- *Relevant Coursework:* Server Administration and Security, Digital File Systems, Secure Web Application & Network Security and Forensics

WORK EXPERIENCE

Visa Inc

Singapore

Incoming Software Engineer (Visa Direct)

Feb. 2023 (Expected)

Synapse

Singapore

Software Engineer Intern

Sep. 2023 – Dec. 2023

- Collaborated on integrating fresh functionalities utilizing ReactJS, Dotnet, and AWS within an internal tool dedicated to aiding the operations team in overseeing the Healthier SG project—an initiative led by MOH at the national level
- Implemented human-readable test cases for HSeaktAR APIs through SpecFlow, enhancing test readability, extensibility and maintainability
- Orchestrated automated load tests on APIs, meticulously simulating real-world scenarios to ensure unparalleled system resilience and optimize peak performance
- Engineered and optimized ETL workflows through AWS Glue and Step Functions, seamlessly automating the extraction and transformation of invaluable data from S3 buckets

Visa Inc

Singapore

Software Engineer Intern (Regional Solutions and Digital Partnership Team)

May. 2023 – Sep. 2023

- Spearheaded the end-to-end development of backend for the Card-On-File Data application using Spring Boot and successfully integrated the application with APIs from multiple teams
- Played a pivotal role in development of the CI/CD pipeline and deployment using Jenkins and Docker
- Exhibited a critical role in leading comprehensive project documentation, and demonstrated adeptness in proficiently crafting database schemas and API specifications
- Demonstrated steadfast commitment to enhancing application security through seamless integration of 3DS card authentication and proactive implementation of shift-left testing
- Played a key role in the frontend development of the project by leveraging NextJS and CSS styling to establish a cohesive visual identity across Visa-owned applications

Visa Inc

Singapore

Software Engineer Intern (Payment Products Team)

May. 2022 – Aug. 2022

- Developed 4 job flows that are scheduled periodically to remediate and report job failures in Visa Resolve Online (VROL)'s QA environments using CloverDX, Bash Scripting and SQL
- Decreased server downtime by 30%, manual troubleshooting, facilitating the VROL Team amounting to 100 over developers & testers working in these environments

- Maintained the VROL application using Java Spring, refactored 500+LoC and added JavaDocs documentation
- Focused on backend development and performed unit testing using Selenium, SoapUI

United Overseas Bank (UOB)

Singapore

Core Business Technology Intern

May. 2021 – Aug. 2021

- Developed and scheduled 10 jobs to automate processes for 3 different applications in 3 different servers, cutting down time spent on repetitive manual work by 40% using Bash
- Establish and maintained communication between the applications in the Stand-in Authorization Switch (STA) which is responsible for routing payment between UOB Singapore and Thailand, using IBM MQ
- Automated reporting of payment failures or frauds in the logs by formulating Splunk queries
- Assist in the migration of different applications from a monolithic architecture to a microservice architecture using Docker, Kubernetes

PROJECTS

Static Program Analyzer | C++ 17

Jan. 2023 – Apr. 2023

- * Working on a software that analyzes the source code of a program, stores its metadata and allows for querying of keywords

PeerPrep | Nest.js, Vite.js, Redis, MySQL, Prisma, Jest, GraphQL

Sep. 2022 – Nov. 2022

- * Worked on PeerPrep, a platform that allows its users to match with each other and give them the opportunity to work together on an algorithmic problem with 3 other members
- * Created RESTful APIs endpoint for user services, authentication, OAuth and managed the sessions and cookies for the backend using Nest.js, Redis, Prisma
- * Assist in UI wireframe of the application and frontend development using React.js, Vite.js
- * Documented the API endpoints using SwaggerUI, performed unit, integration and E2E testing using Jest

McKitchen | Java, JavaFX, Junit5

Feb. 2022 – May. 2022

- * Spearheaded development of a Java desktop application that aims to help beginner cooks and students to manage their recipes
- * Participated in weekly scrum meetings, reviewed 60 pull requests of teammates thoroughly and contributed 2k LoC worth of feature, tests and docs code
- * Managed the project timeline using GitHub milestone, worked on User Stories and Use cases

TECHNICAL SKILLS

Languages: Java, Python, C, C++, JavaScript/TypeScript, PHP, HTML, CSS, Bash

Libraries & Frameworks: Nest.js, Express.js, Node.js, Gatsby.js, React.js, Spring Boot

Databases: MongoDB, PostgreSQL, MySQL, Redis

DevOps Tools : Docker, Kubernetes, Splunk, Jenkins

Testing Tools : Jest, Postman, Selenium, SoapUI

Others : CloverDX, Hadoop, Spark, Google's Cloud Run, AWS (Glue, Lambda, Step)

AWARDS

Honors & Awards : CSIT Scholarship AY2015/2016 & AY2017/2018, Director's List AY2015/2016 and AY2016/2017

Hackathons & Competitions : Earth2 Cyber League 2022, CSIT TISC 2022, STANDCON 2022, BrainHack 2021 & 8th Singapore Cyber Conquest 2017

Certification & Courses : Meta's Above and Beyond Computer Science (ABCs) Program, Linux Redhat Certified System Administrator (RHCSA), Udemy Courses: Dockers for Absolute Beginners, JavaScript - Complete Guide, Node.js - Complete Guide