## ALAN MATTHEW

28 College Avenue West, Singapore | +65 8425 5742

 $alan.matthew.yk@gmail.com \ | \ linkedin.com/in/yokurang \ | \ github.com/yokurang \ | \ https://yokurang.com \ | \ https://yok$ 

## EDUCATION

Relevant Coursework: Parallel Programming, Programming Language Design, Machine Learning         Professional Certification: AWS Cloud Practitioner         Awards: Kewalram Chanrai Full Scholarship         EXPERIENCE         Evooq       Swiss Wealth and Asset Management SaaS         Software Engineering Intern       Jan 2024 - Apr 2024         • GenAl Trading Tool: Built a Python application that uses large language models to generate trading strategies, simulate these strategies on historical data, and produce a report on the performance.         • Chatbot for Querying Data: Engineered a Python-based chatbot leveraging large language models for querying data and generating charts from a MariaDB database through natural language prompts.         Hatcher+       Singaporean Venture Capital SaaS         Software Engineering Intern       May 2023 - Aug 2023         • Data Parsing Microservice: Engineered a Python microservice from scratch to parse excel company capitalization documents into structured JSONs using a large language model, saving data entry time.         • Imployee Leave System: Built an employee leave system using Vue, is, Laravel, and MySQL to handle employee data, manage leave requests, and display leave information on employee calendars.         • Investment Data Smart Contract: Authored a smart contract in Golang to store investment information on the AWS Hyperledger Fabric blockchain network to facilitate reliable data storage.         Switcho Labs       Singaporean Cryptocurrency Exchange         Software Engineering Intern       Oct 2022 - Dec 2022	Yale-NUS College Bachelor of Science in Math and Computer Science; Minor in	Economics; GPA: 4.86/5.00 Singapore May 2025
Evooq       Swiss Wealth and Asset Management SaaS         Software Engineering Intern       Jan 2024 - Apr 2024         • GenAI Trading Tool: Built a Python application that uses large language models to generate trading strategies, simulate these strategies on historical data, and produce a report on the performance.         • Chabot for Querying Data: Engineered a Python-based chabot leveraging large language models for querying data and generating charts from a MariaDB database through natural language prompts.         Hatcher+       Singaporean Venture Capital SaaS         Software Engineering Intern       May 2023 - Aug 2023         • Data Parsing Microservice: Engineered a Python microservice from scratch to parse excel company capitalization documents into structured JSONs using a large language model, saving data entry time.         • Employee Leave System: Built an employee leave system using Vue.js, Laravel, and MySQL to handle employee data, manage leave requests, and display leave information on employee calendars.         • Investment Data Smart Contract: Authored a smart contract in Golang to store investment information on the AWS Hyperledger Fabric blockchain network to facilitate reliable data storage.         Switchco Labs       Singaporean Cryptocurrency Exchange Oct 2022 - Dec 2022         • Consolidated Search API: Created a Golang API to aggregate and consolidate data from multiple databases into a single, unified API call, simplifying the information search process for 96,000+ users.         • Market-Pool Linkage: Leveraged Golang to automatically link markets and liquidity pools, eliminating manual work and and securely allocating	Relevant Coursework: Parallel Programming, Programmin Professional Certification: AWS Cloud Practitioner	
Software Engineering Intern       Jan 2024 - Apr 2024         • GenAI Trading Tool: Built a Python application that uses large language models to generate trading strategies, simulate these strategies on historical data, and produce a report on the performance.         • Chatbot for Querying Data: Engineered a Python-based chatbot leveraging large language models for querying data and generating charts from a MariaDB database through natural language prompts.         Hatcher+       Singaporean Venture Capital SaaS Software Engineering Intern         • Data Parsing Microservice: Engineered a Python microservice from scratch to parse excel company capitalization documents into structured JSONs using a large language model, saving data entry time.         • Employee Leave System: Built an employee leave system using Vue.js, Laravel, and MySQL to handle employee data, manage leave requests, and display leave information on employee calendars.         • Investment Data Smart Contract: Authored a smart contract in Golang to store investment information on the AWS Hyperledger Fabric blockchain network to facilitate reliable data storage.         Switcheo Labs       Singaporean Cryptocurrency Exchange Oct 2022 - Dec 2022         • Consolidated Search API: Created a Golang API to aggregate and consolidate data from multiple databases into a single, unified API call, simplifying the information search process for 96,000+ users.         • Market-Pool Linkage: Leveraged Golang to automatically link markets and liquidity pools, eliminating manual work and and securely allocating USD \$130+ million of capital across the exchange.         • Transaction Service & UI: Implemented a microservice in TypeScript to monit	EXPERIENCE	
<ul> <li>Chatbot for Querying Data: Engineered a Python-based chatbot leveraging large language models for querying data and generating charts from a MariaDB database through natural language prompts. Hatcher+ Singaporean Venture Capital SaaS Software Engineering Intern May 2023 - Aug 2023</li> <li>Data Parsing Microservice: Engineered a Python microservice from scratch to parse excel company capitalization documents into structured JSONs using a large language model, saving data entry time.</li> <li>Employee Leave System: Built an employee leave system using Vue.js, Laravel, and MySQL to handle employee data, manage leave requests, and display leave information on employee calendars.</li> <li>Investment Data Smart Contract: Authored a smart contract in Golang to store investment information on the AWS Hyperledger Fabric blockchain network to facilitate reliable data storage.</li> <li>Switcheo Labs Singaporean Cryptocurrency Exchange Oct 2022 - Dec 2022</li> <li>Consolidated Search API: Created a Golang API to aggregate and consolidate data from multiple databases into a single, unified API call, simplifying the information search process for 96,000+ users.</li> <li>Market-Pool Linkage: Leveraged Golang to automatically link markets and liquidity pools, climinating manual work and and securely allocating USD \$130+ million of capital across the exchange.</li> <li>Transaction Service &amp; UI: Implemented a microservice in TypeScript to monitor and collect data on CDP transactions and visualize the trading activities using React, serving 35,000 daily visitors.</li> <li>Telegram Bot for Blockchain Monitoring: Created a Telegram Bot using TypeScript and Redis to allot 222 - Aug 2022 - Aug 2022</li> <li>Investment Dashboard Enhancement: Implemented new features using Vue, and Kotlin to improve the presentation of financial statements and key metrics, boosting user reviews by 17%.</li> <li>Covenant Page Development: Designed and developed a covenant page from scratch using Vue,</li></ul>	<b>Evooq</b> Software Engineering Intern	Swiss Wealth and Asset Management SaaS Jan 2024 - Apr 2024
for querying data and generating charts from a MariaDB database through natural language prompts. Hatcher+ Singaporean Venture Capital SasS Software Engineering Intern May 2023 - Aug 2023 • Data Parsing Microservice: Engineered a Python microservice from scratch to parse excel company capitalization documents into structured JSONs using a large language model, saving data entry time. • Employee Leave System: Built an employee leave system using Vue,js. Laravel, and MySQL to handle employee data, manage leave requests, and display leave information on employee calendars. • Investment Data Smart Contract: Authored a smart contract in Golang to store investment information on the AWS Hyperledger Fabric blockchain network to facilitate reliable data storage. Switcheo Labs Singaporean Cryptocurrency Exchange Software Engineering Intern Oct 2022 - Dec 2022 • Consolidated Search API: Created a Golang API to aggregate and consolidate data from multiple databases into a single, unified API call, simplifying the information search process for 96,000+ users. • Market-Pool Linkage: Leveraged Golang to automatically link markets and liquidity pools, eliminating manual work and and securely allocating USD \$130+ million of capital across the exchange. • Transaction Service & UI: Implemented a microservice in TypeScript to monitor and collect data on CDP transactions and visualize the trading activities using React, serving 35,000 daily visitors. • Telegram Bot for Blockchain Monitoring: Created a Telegram Bot using TypeScript and Redis to alert the team about stalled Carbon blockchain transactions, increasing the resolution speed by 83%. Investree Jakarta P2P Fintech Lending Software Engineering Intern May 2022 - Aug 2022 • Investment Dashboard Enhancement: Implemented new features using Vue, js and Kotlin to improve the presentation of financial statements and key metrics, boosting user reviews by 17%. • Covenant Page Development: Designed and developed a covenant page from scratch using Vue, js and K	<b>o v ii</b>	0 0 0 0
<ul> <li>Software Engineering Intern</li> <li>May 2023 - Aug 2023</li> <li>Data Parsing Microservice: Engineered a Python microservice from scratch to parse excel company capitalization documents into structured JSONs using a large language model, saving data entry time.</li> <li>Employee Leave System: Built an employee leave system using Vue, js, Laravel, and MySQL to handle employee data, manage leave requests, and display leave information on employee calendars.</li> <li>Investment Data Smart Contract: Authored a smart contract in Golang to store investment information on the AWS Hyperledger Fabric blockchain network to facilitate reliable data storage.</li> <li>Switcheo Labs</li> <li>Singaporean Cryptocurrency Exchange</li> <li>Consolidated Search API: Created a Golang API to aggregate and consolidate data from multiple databases into a single, unified API call, simplifying the information search process for 96,000+ users.</li> <li>Market-Pool Linkage: Leveraged Golang to automatically link markets and liquidity pools, eliminating manual work and and securely allocating USD \$130+ million of capital across the exchange.</li> <li>Transaction Service &amp; UI: Implemented a microservice in TypeScript to monitor and collect data on CDP transactions and visualize the trading activities using React, serving 35,000 daily visitors.</li> <li>Telegram Bot for Blockchain Monitoring: Created a Telegram Bot using TypeScript and Redis to alert the team about stalled Carbon blockchain transactions, increasing the resolution speed by 83%.</li> <li>Investment Dashboard Enhancement: Implemented new features using Vue.js and Kotlin to improve the presentation of financial statements and key metrics, boosting user reviews by 17%.</li> <li>Covenant Page Development: Designed and developed a covenant page from scratch using Vue.js and Kotlin, simplifying the contractual agreement process for over 59,000 business loans.</li> <li>RESTful API Development: Developed and deployed RE</li></ul>	for querying data and generating charts from a $\mathbf{MariaDB}$	database through natural language prompts.
<ul> <li>capitalization documents into structured JSONs using a large language model, saving data entry time.</li> <li>Employee Leave System: Built an employee leave system using Vue.js, Laravel, and MySQL to handle employee data, manage leave requests, and display leave information on employee calendars.</li> <li>Investment Data Smart Contract: Authored a smart contract in Golang to store investment information on the AWS Hyperledger Fabric blockchain network to facilitate reliable data storage.</li> <li>Switcheo Labs Singaporean Cryptocurrency Exchange Oct 2022 - Dec 2022</li> <li>Consolidated Search API: Created a Golang API to aggregate and consolidate data from multiple databases into a single, unified API call, simplifying the information search process for 96,000+ users.</li> <li>Market-Pool Linkage: Leveraged Golang to automatically link markets and liquidity pools, eliminating manual work and and securely allocating USD \$130+ million of capital across the exchange.</li> <li>Transaction Service &amp; UI: Implemented a microservice in TypeScript to monitor and collect data on CDP transactions and visualize the trading activities using React, serving 35,000 daily visitors.</li> <li>Telegram Bot for Blockchain Monitoring: Created a Telegram Bot using TypeScript and Redis to alert the team about stalled Carbon blockchain transactions, increasing the resolution speed by 83%. Investree Jakarta P2P Fintech Lending May 2022 - Aug 2022</li> <li>Investment Dashboard Enhancement: Implemented new features using Vue.js and Kotlin to improve the presentation of financial statements and key metrics, boosting user reviews by 17%.</li> <li>Covenant Page Development: Designed and developed a covenant page from scratch using Vue.js and Kotlin, simplifying the contractual agreement process for ver 59,000 business loans.</li> <li>RESTful API Development: Developed and deployed RESTful APIs in Kotlin for data querying, processing, and validation from Postgres databases, serving the fro</li></ul>		÷
<ul> <li>handle employee data, manage leave requests, and display leave information on employee calendars.</li> <li>Investment Data Smart Contract: Authored a smart contract in Golang to store investment information on the AWS Hyperledger Fabric blockchain network to facilitate reliable data storage.</li> <li>Switcheo Labs Singaporean Cryptocurrency Exchange Oct 2022 - Dec 2022</li> <li>Consolidated Search API: Created a Golang API to aggregate and consolidate data from multiple databases into a single, unified API call, simplifying the information search process for 96,000+ users.</li> <li>Market-Pool Linkage: Leveraged Golang to automatically link markets and liquidity pools, eliminating manual work and and securely allocating USD \$130+ million of capital across the exchange.</li> <li>Transaction Service &amp; UI: Implemented a microservice in TypeScript to monitor and collect data on CDP transactions and visualize the trading activities using React, serving 35,000 daily visitors.</li> <li>Telegram Bot for Blockchain Monitoring: Created a Telegram Bot using TypeScript and Redis to alert the team about stalled Carbon blockchain transactions, increasing the resolution speed by 83%.</li> <li>Investree Jakarta P2P Fintech Lending Software Engineering Intern May 2022 - Aug 2022</li> <li>Investment Dashboard Enhancement: Implemented new features using Vue.js and Kotlin to improve the presentation of financial statements and key metrics, boosting user reviews by 17%.</li> <li>Covenant Page Development: Designed and developed a covenant page from scratch using Vue.js and Kotlin, simplifying the contractual agreement process for over 59,000 business loans.</li> <li>RESTful API Development: Developed and deployed RESTful APIs in Kotlin for data querying, processing, and validation from Postgres databases, serving the frontend needs of over 100,000 users.</li> </ul>	<b>3 3</b>	1 1 0
<ul> <li>information on the AWS Hyperledger Fabric blockchain network to facilitate reliable data storage.</li> <li>Switcheo Labs</li> <li>Singaporean Cryptocurrency Exchange Software Engineering Intern</li> <li>Oct 2022 - Dec 2022</li> <li>Consolidated Search API: Created a Golang API to aggregate and consolidate data from multiple databases into a single, unified API call, simplifying the information search process for 96,000+ users.</li> <li>Market-Pool Linkage: Leveraged Golang to automatically link markets and liquidity pools, eliminating manual work and and securely allocating USD \$130+ million of capital across the exchange.</li> <li>Transaction Service &amp; UI: Implemented a microservice in TypeScript to monitor and collect data on CDP transactions and visualize the trading activities using React, serving 35,000 daily visitors.</li> <li>Telegram Bot for Blockchain Monitoring: Created a Telegram Bot using TypeScript and Redis to alert the team about stalled Carbon blockchain transactions, increasing the resolution speed by 83%.</li> <li>Investree Jakarta P2P Fintech Lending Software Engineering Intern May 2022 - Aug 2022</li> <li>Investment Dashboard Enhancement: Implemented new features using Vue.js and Kotlin to improve the presentation of financial statements and key metrics, boosting user reviews by 17%.</li> <li>Covenant Page Development: Designed and developed a covenant page from scratch using Vue.js and Kotlin, simplifying the contractual agreement process for over 59,000 business loans.</li> <li>RESTful API Development: Developed and deployed RESTful APIs in Kotlin for data querying, processing, and validation from Postgres databases, serving the frontend needs of over 100,000 users.</li> </ul>		
<ul> <li>Software Engineering Intern</li> <li>Oct 2022 - Dec 2022</li> <li>Consolidated Search API: Created a Golang API to aggregate and consolidate data from multiple databases into a single, unified API call, simplifying the information search process for 96,000+ users.</li> <li>Market-Pool Linkage: Leveraged Golang to automatically link markets and liquidity pools, eliminating manual work and and securely allocating USD \$130+ million of capital across the exchange.</li> <li>Transaction Service &amp; UI: Implemented a microservice in TypeScript to monitor and collect data on CDP transactions and visualize the trading activities using React, serving 35,000 daily visitors.</li> <li>Telegram Bot for Blockchain Monitoring: Created a Telegram Bot using TypeScript and Redis to alert the team about stalled Carbon blockchain transactions, increasing the resolution speed by 83%. Investree Jakarta P2P Fintech Lending Software Engineering Intern May 2022 - Aug 2022</li> <li>Investment Dashboard Enhancement: Implemented new features using Vue.js and Kotlin to improve the presentation of financial statements and key metrics, boosting user reviews by 17%.</li> <li>Covenant Page Development: Designed and developed a covenant page from scratch using Vue.js and Kotlin, simplifying the contractual agreement process for over 59,000 business loans.</li> <li>RESTful API Development: Developed and deployed RESTful APIs in Kotlin for data querying, processing, and validation from Postgres databases, serving the frontend needs of over 100,000 users.</li> </ul>		-
<ul> <li>databases into a single, unified API call, simplifying the information search process for 96,000+ users.</li> <li>Market-Pool Linkage: Leveraged Golang to automatically link markets and liquidity pools, eliminating manual work and and securely allocating USD \$130+ million of capital across the exchange.</li> <li>Transaction Service &amp; UI: Implemented a microservice in TypeScript to monitor and collect data on CDP transactions and visualize the trading activities using React, serving 35,000 daily visitors.</li> <li>Telegram Bot for Blockchain Monitoring: Created a Telegram Bot using TypeScript and Redis to alert the team about stalled Carbon blockchain transactions, increasing the resolution speed by 83%. Investree Jakarta P2P Fintech Lending Software Engineering Intern May 2022 - Aug 2022</li> <li>Investment Dashboard Enhancement: Implemented new features using Vue.js and Kotlin to improve the presentation of financial statements and key metrics, boosting user reviews by 17%.</li> <li>Covenant Page Development: Designed and developed a covenant page from scratch using Vue.js and Kotlin, simplifying the contractual agreement process for over 59,000 business loans.</li> <li>RESTful API Development: Developed and deployed RESTful APIs in Kotlin for data querying, processing, and validation from Postgres databases, serving the frontend needs of over 100,000 users.</li> </ul>	Switcheo Labs Software Engineering Intern	
<ul> <li>eliminating manual work and and securely allocating USD \$130+ million of capital across the exchange.</li> <li>Transaction Service &amp; UI: Implemented a microservice in TypeScript to monitor and collect data on CDP transactions and visualize the trading activities using React, serving 35,000 daily visitors.</li> <li>Telegram Bot for Blockchain Monitoring: Created a Telegram Bot using TypeScript and Redis to alert the team about stalled Carbon blockchain transactions, increasing the resolution speed by 83%. Investree Jakarta P2P Fintech Lending Software Engineering Intern May 2022 - Aug 2022</li> <li>Investment Dashboard Enhancement: Implemented new features using Vue.js and Kotlin to improve the presentation of financial statements and key metrics, boosting user reviews by 17%.</li> <li>Covenant Page Development: Designed and developed a covenant page from scratch using Vue.js and Kotlin, simplifying the contractual agreement process for over 59,000 business loans.</li> <li>RESTful API Development: Developed and deployed RESTful APIs in Kotlin for data querying, processing, and validation from Postgres databases, serving the frontend needs of over 100,000 users.</li> </ul>	<b>c c c i</b>	
<ul> <li>on CDP transactions and visualize the trading activities using React, serving 35,000 daily visitors.</li> <li>Telegram Bot for Blockchain Monitoring: Created a Telegram Bot using TypeScript and Redis to alert the team about stalled Carbon blockchain transactions, increasing the resolution speed by 83%.</li> <li>Investree Jakarta P2P Fintech Lending May 2022 - Aug 2022</li> <li>Investment Dashboard Enhancement: Implemented new features using Vue.js and Kotlin to improve the presentation of financial statements and key metrics, boosting user reviews by 17%.</li> <li>Covenant Page Development: Designed and developed a covenant page from scratch using Vue.js and Kotlin, simplifying the contractual agreement process for over 59,000 business loans.</li> <li>RESTful API Development: Developed and deployed RESTful APIs in Kotlin for data querying, processing, and validation from Postgres databases, serving the frontend needs of over 100,000 users.</li> </ul>	<b>3</b>	
<ul> <li>to alert the team about stalled Carbon blockchain transactions, increasing the resolution speed by 83%.</li> <li>Investree Jakarta P2P Fintech Lending Software Engineering Intern May 2022 - Aug 2022</li> <li>Investment Dashboard Enhancement: Implemented new features using Vue.js and Kotlin to improve the presentation of financial statements and key metrics, boosting user reviews by 17%.</li> <li>Covenant Page Development: Designed and developed a covenant page from scratch using Vue.js and Kotlin, simplifying the contractual agreement process for over 59,000 business loans.</li> <li>RESTful API Development: Developed and deployed RESTful APIs in Kotlin for data querying, processing, and validation from Postgres databases, serving the frontend needs of over 100,000 users.</li> </ul>	-	v
<ul> <li>Software Engineering Intern May 2022 - Aug 2022</li> <li>Investment Dashboard Enhancement: Implemented new features using Vue.js and Kotlin to improve the presentation of financial statements and key metrics, boosting user reviews by 17%.</li> <li>Covenant Page Development: Designed and developed a covenant page from scratch using Vue.js and Kotlin, simplifying the contractual agreement process for over 59,000 business loans.</li> <li>RESTful API Development: Developed and deployed RESTful APIs in Kotlin for data querying, processing, and validation from Postgres databases, serving the frontend needs of over 100,000 users.</li> </ul>	0	° ° ° °
<ul> <li>improve the presentation of financial statements and key metrics, boosting user reviews by 17%.</li> <li>Covenant Page Development: Designed and developed a covenant page from scratch using Vue.js and Kotlin, simplifying the contractual agreement process for over 59,000 business loans.</li> <li>RESTful API Development: Developed and deployed RESTful APIs in Kotlin for data querying, processing, and validation from Postgres databases, serving the frontend needs of over 100,000 users.</li> </ul>	Investree Software Engineering Intern	8
<ul> <li>and Kotlin, simplifying the contractual agreement process for over 59,000 business loans.</li> <li>RESTful API Development: Developed and deployed RESTful APIs in Kotlin for data querying, processing, and validation from Postgres databases, serving the frontend needs of over 100,000 users.</li> </ul>	-	° °
processing, and validation from <b>Postgres</b> databases, serving the frontend needs of over 100,000 users.		
SKILLS		
	SKILLS	

Languages: C++, Python, TypeScript, JavaScript, OCaml, Golang, Scala, Kotlin, PHP, SQL, tCPA Frameworks: React, Vue.js, Next.js, Express.js, Flask, Laravel, AWS (Lambda, DynamoDB)