

Youkim Chhay

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EDUCATION

Master of Science, Computer Science | Maharishi International University (MIU) | Fairfield, IA Oct 2022 - Present
3.88 GPA | Key Courses: Web Application Architecture, Enterprise Architecture, Algorithms, Advanced Software Development.

Bachelor of Information Technology | Macquarie University (MQU) | Sydney, NSW, Australia Jul 2018 - Aug 2020
90 WAM | Merit List, Award for Academic Excellence, STEM Scholarship
Key Courses: Object Oriented Programming Practices, Software Engineering, Algorithm Theory and Design.

Diploma of Information Technology | MQU Oct 2017 - July 2018
6.75 GPA | Award for Academic Excellence, ASEAN Scholarship
Key Courses: Fundamentals of Computer Science, Introduction to Database Design and Management.

PROJECTS

[Secure Online Auction System](#) | MIU | Web Application Architecture Oct 2023
Spring (Boot, Web MVC, Security, Data JPA), MySQL, RESTful APIs, JWT, Git

- Implemented a secure and reliable RESTful backend application, scheduling updates on auction progress.
- Engineered a secure bidding protocol adhering to domain-driven design and architectural analysis.
- Collaborated with a front-end team to deliver a full-stack web application, optimizing load times and responsiveness.

[Online Retail System](#) | MIU | Enterprise Architecture May 2023
Spring (Boot, Web MVC, Data JPA), PostgreSQL, RESTful APIs, Git

- Developed a seamless order process through RESTful APIs, optimizing efficiency for an online shopping platform.
- Coded a high-performance backend application, ensuring optimal functionality and scalability.

[Event Organizer Application](#) | MIU | Modern Web Application Mar 2023
Node.js, Express.js, MongoDB, MVC, RESTful APIs, JWT, Amazon S3, Heroku, Git

- Built a secure and scalable RESTful backend application with rigorous error-handling mechanisms and user authentication.
- Deployed both front and back ends, increasing accessibility and garnering **98%** positive stakeholder feedback.
- Collaborated with a front-end team to launch a full-stack web application, improving functionalities and user experience.

[Weather Dashboard](#) Apr - May 2021
Express.js, Bootstrap, OpenWeather API, Heroku, Git

- Designed a dynamic web application to forecast real-time weather exceeding **92%** accuracy for over **200k** cities.
- Deployed the application to enhance cross-device accessibility, receiving positive user testimonials.
- Utilized localStorage web API to save user search cities, resulting in a seamless and efficient search experience.

[Password Generator](#) Apr 2021
HTML, CSS, JavaScript, Git, GitHub Page

- Created a secure web application to generate passwords tailored to user preferences (desired length and character types), ensuring **95%** of the passwords generated with 12 or more characters secured from the dictionary and brute force attacks.

Electronic Voting | MQU | Computing Industry Project Feb - Jun 2020
Django, SQLite, MVC, RESTful APIs, Amazon EC2, Git

- Led the end-to-end development of a web application automating voting for Macquarie University (top **1%** global university) Department of Higher Degree by Research, achieving a **50%** reduction in time and resources.
- Delivered a secure and reliable voting application, producing a remarkable **99%** accuracy rate in vote counts.
- Integrated data visualization for comprehensive insights, enhancing analysis and reporting by **30%**.

SKILLS

Languages: Java, JavaScript, Python, HTML, CSS, Processing

Frameworks: Spring (Boot, Web MVC, Security, Data JPA), JUnit, Node.js, Express.js

Design Patterns: MVC, PUB/SUB, COR, Strategy, State, Adapter, Proxy, Singleton, Factory, REST

Databases / Technologies: MongoDB, SQL / Git, Amazon EC2, Amazon S3, Heroku