# Meng Jun (John) Chui

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# **EDUCATION**

#### MONASH UNIVERSITY

Clayton, VIC

Bachelor of Computer Science Advanced (Honours) Anticipated graduation: Dec 2026

**GPA:** 4.0/4.0

Relevant Coursework: Data Structures and Algorithms (Advanced), Computer Systems, Networks and Security, Discrete Mathematics, Fundamentals of Algorithms (Advanced), Programming in Java, Programming in Python, Object Oriented Programming, Databases (SQL)

#### **EXPERIENCES**

CODE CAMP

Point Cook, VIC

Kids After School Coding Program Educator

Oct 2024 - Current

- Used Scratch and Python to teach coding fundamentals to students aged 7-13, enhancing their problem-solving skills and increasing engagement by 30%
- Utilised project-based learning techniques to guide students in building interactive games and animations, resulting in 85% of students successfully completing their final projects

#### PRIVATE MATH TUTOR

Point Cook, VIC

Self Employed Math Tutor

Jan 2024 - Current

- Implemented adaptive teaching techniques based on students' strengths and weaknesses to prepare them for SACs and final exams, with over 80% of students achieving their target grades or higher
- Utilised tools (Desmos, CAS, Mathematica) to help students grasp complex calculus and algebra concepts, leading to 90% of students reporting increased confidence in problem-solving

### **PROJECTS**

AI CHESS GAME

Point Cook, VIC

Jan 2025 - Feb 2025

- Lead Developer Developed a chess game in Python (Pygame) with AI-powered move generation and enabled real-time gameplay
- with AI response time of  $\leq 0.5$ s Implemented piece movement, board highlights, and checkmate detection which created an intuitive user experience, reducing misclicks by 30%
- Ensured seamless integration of Stockfish engine and assets, reducing crashes and improved game stability for 100% playability

## AI STOCK ANALYSER WITH LANGCHAIN

Point Cook, VIC

Lead Developer

Jan 2025 - Feb 2025

- Utilised Python libraries (Pandas, NumPy, yFinance and Dateutil) to retrieve, process and analyse financial time series data, improving data handling efficiency by 30% and reducing manual retrieval time by 90%
- Applied PyPortfolioOpt to optimise investment portfolios, increasing risk-adjusted returns by 20%
- Leveraged LangChain with OpenAI to generate AI-driven market insights, automating analysis and saving 5+ hours per week.

# MACHINE LEARNING MODEL FOR OPTIMAL CROPS

Clayton, VIC

Co-Developer

*Mar* 2024 – *Mar* 2024

- Implemented a K-Nearest Neighbours (KNN) algorithm in Python (PyLab) to classify plant suitability, achieving an accurate prediction rate of 90%
- Developed a **Z-score normalisation** function to standardise environmental data, improving model consistency and reducing data bias by 30%
- Optimised KNN distance calculations using Euclidean metrics, enhancing classification efficiency by 20%

## ADDITIONAL SKILLS

Programming: Python, Java, HTML/CSS, JavaScript, SQL