

# Ho Kei Ching

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## EDUCATION

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- **National University of Singapore** Est. 2030  
*Singapore*
- Offered Double Degree Program in B.Comp (Computer Science) (Hons) and B.Sc in Mathematics
- Offered the NUS Merit Scholarship

**Nanyang Junior College** Dec. 2022  
*Singapore*

- Scored 6 distinctions
- Subjects studied: Physics, Chemistry, Mathematics, Economics, General Paper, Project Work
- Attained maximum possible rank points (90) for university admissions

## PROJECTS

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- Created a Discord bot using Python and Discord's API to stream music from YouTube, enhancing user experience for my friends with seamless music playback
- Created a Telegram bot leveraging LTA's DataMall API to provide real-time bus arrival timings across Singapore
- Participated in Hacknosis: Sustainable MedTech virtual hackathon, where I developed a project that utilized AWS IoT APIs to detect temperature anomalies in refrigerated containers using Isolated Forest training model.
- Created an algorithmic trading bot using Python, Pandas, NumPy and ML algorithms to simulate the average historical returns of the S&P500 using an unsupervised learning trading strategy.
- Personal Portfolio Website (Built using HTML, CSS, JavaScript) hosted on <https://snowcrashcode.github.io/Portfolio>

## COURSEWORK

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- Harvard CS50x: Harvard's flagship introduction course to the intellectual enterprises of computer science.
- Java Programming I and II by University of Helsinki: Algorithms and OOP taught using Java
- Haskell MOOC I and II by University of Helsinki: Functional programming course taught using Haskell. Learnt important functional programming paradigms and how to problem solve in code using a mathematical perspective
- The Odin Project's Foundation course: Learnt essential Front-End skills, including HTML, CSS, JavaScript, React
- MIT's The Missing Semester: Learnt about the Linux OS, bash scripting and vim
- Studied Operating Systems: Three Easy Pieces. Learnt virtual memory systems and concurrency.

## TECHNICAL SKILLS

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- **Languages:** Java, C++, Python, SQL, HTML, CSS, JavaScript, Haskell, React
- **Software:** MS Excel, PowerPoint, Word, VS Code, IntelliJ Idea
- **Technologies/Frameworks:** GitHub, Docker, Kubernetes, ML Libraries (NumPy, Pandas)

## EXPERIENCES

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### Administrative Support Assistant, MINDEF

Mar 2023 - Present

- Manpower branch in formation HQ
- Assisted in vetting and editing of competency frameworks of interested candidates
- Daily taskings include handling word documents, using excel to analyze data, and tracking of issues and schedules of formation's service personnel

## VOLUNTEERING EXPERIENCES

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### Budget Budd

July 2024 – Present

- Development Executive
- Spearhead development projects, enhancing financial education accessibility for disadvantaged communities

### CompetifyHub

2024

- Used LaTeX to write sample US Olympiad problems and solutions for student-ran mathematics Olympiad competitions

### Community Services

2020 - Present

*Singapore*

- Cared and assisted workers in looking after the elderly
- Involved in a student-initiated workshop to teach the elderly useful technology skills, such as how to navigate their smartphones and social media applications

## OTHER INTERESTS & EXPERIENCES

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- **Languages:** English (Fluent), Mandarin (Proficient) – Able to converse in Cantonese
- Will be released from Full-Time National Service on 26 January 2025
- Beginner Level in Kubernetes/DevOps (CI/CD)
- Interested in all things tech-related; keen to learn
- Personal Interests: Music, Piano, Gaming, Working out