

# JIAN BIN WONG

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## SKILLS

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- Python (scientific) programming, MATLAB, Mathematics, Physics, Competitive Programming, Machine Learning

## WORK EXPERIENCE

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### WorldQuant, RESEARCH CONSULTANT

Dec 24 - Present

- Utilize the WorldQuant Brain Platform to build Alphas, mathematical models that seek to predict future price movements of various financial instruments and contribute to WorldQuant's overall research effort.
- Simulated more than 250 alphas with best alpha performance of 2.93 Sharpe ratio and 29.92% PnL.

### AMISO, PHYSICS TUTOR & PROBLEM SETTER

Jul 23 - Present

- Selected as a Physics problem setter for the Malaysian Physics Olympiad Selection Test and provided specialized tutoring for advanced-level Physics Olympiad participants.
- Selected as Board Member of Association of Malaysian Alumni in the International Science(AMISO).

## EDUCATION

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### National University of Singapore (NUS)

Aug 24 - May 28

#### Bachelor of Engineering, Electrical Engineering (HONS)

- Electrical Engineering (HONS), Minors in Quantitative Finance, AI (Design and Engineering), Robotics Specialisation
- GPA: 4.9/5.0
- Inducted into Lambda Omega (NUS) Chapter of the IEEE-Eta Kappa Nu (IEEE-HKN) in AY25/26.
- Current recipient of ASEAN Undergraduate Scholarship.
- Placed on Dean's List for AY25/26 S1.

### Chong Hwa Independent High School

Jan 18 - Dec 23

#### SUEC

- Graduated as valedictorian and awarded prestigious Harvard Book Prize.

## AWARDS

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- IPhO 2023, EuPhO 2024- Bronze Medal
- APhO 2024 - Silver Medal

## ACADEMIC PROJECTS

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### EE2028 Microcontroller Programming and Interfacing

Aug 25 - Nov 25

- Implemented Infinite Impulse Response (IIR) filter on STM32L4S5VIT6 chip with assembly language.
- Developed a 40Hz AHRS-guided 3D LiDAR Point Cloud visualisation with B-L4S5I-IOT01A onboard sensors (VL53L0X, LSM6DSL, LIS3MDL) and Open3D.

**Summer Mingyue bootcamp, Elite Institute of Engineering****Jun 25 - Jul 25**

- Enrolled in a 3-week startup experience bootcamp at Elite Institute of Engineering, Chongqing University, comprising design thinking and prototyping phases.
- Developed a bidirectional LSTM machine learning model for single-channel EEG signal processing to detect nocturnal mouth breathing with 89% accuracy and 90% sensitivity.

**CDE2310 Fundamentals of Systems Design****Jan 25 - Apr 25**

- Built an autonomous maze-solving turtlebot with ROS2 Humble.
- Designed and implemented system architecture of turtlebot to accomplish projectile firing tasks and maze-solving algorithms.
- Designed and verified PCB for integration of turtlebot external sensors and actuators