

## DUKE UNIVERSITY

**Bachelor of Science, Computer Science;**  
**Bachelor of Science, Economics** (Double Major);

Certificate in Philosophy, Political Science and Economics; Foreign Language: **Chinese**

**CLASS OF 2025**

Cum. **GPA: 3.8 of 4.0**; Selection of coursework:

*Durham, NC*

- **CS:** *graduate* Algorithmic Game Theory, Deep Learning; *undergrad.* Databases, Advanced Algorithms
- **Economics:** *graduate* Mathematical Finance & Derivatives; *undergrad.* Econometrics, Macro & Micro
- **Math:** Statistical Inference & Learning, Linear Algebra, Multivariable Calculus
- **Liberal Arts:** Renaissance Art & History, Marxism, Distributive Justice, Queer Theory & Feminism

## SAINT MAUR INT'L SCHOOL

**IB Bilingual Diploma**, Japanese and English; GPA: 4.77 of 4.5; AP 8 Subjects; IB: 42/45;

**CLASS OF 2019**

Award of Academic Excellence and Leadership (one student); Student Council **President** *Yokohama, Japan*

## WORK & INTERNSHIP

**Nomura Securities** Market Risk Engines – *Full-time Intern*

**SUMMER 2024** NYC

- Groundbreaking division's LLM use in risk analysis through CoT reasoning, ReAct agent and tool-use.
- Automated fund report performance/quant extraction from reports using RAG and vision
- Wrote libraries interfacing LLM and OLAP/SQL DBs, automating risk analysis tasks

**Hitachi Social Information Solutions** – *Full-time Intern*

**SUMMER 2023** Tokyo

- Spearheaded administration front-end development (Angular) for Hitachi's Public Biometric Infrastructure initiative. Client was Japanese local government.
- Strengthened communication between developer and client with combined dev. and pros. mgmt. skills

**Rep. of Korea Navy Interpretation Officer**

**NOV 2020 - JUL 2022**

- Lead interpretation for US-ROK Command Post Training (CCPT) exercises
- Managed visiting crew from U.K., U.S., Indonesia, Germany for technical submarine tours

*Jinhae, South Korea*

**Cydoc Medical Notes** – *Front End & Graphic Design Intern*

**SUMMER 2020**

- Oversaw a front-end UI overhaul with Javascript, React and Semantic-UI, with supporting branding guidelines & logo; adopted for final launch product

*Durham, NC*

**KKMani's Sprout Team** – *Financial News on Renewable Energy*

**SUMMER 2019** Tokyo

- Spearheaded a full rewrite of a cross-platform email framework with HTML & CSS, leading to enhanced client-side compatibility and standard adherence

## WRITTEN WORK

**Wolfram Research Summer Program** – *"Exploration of Fundamental Maths via Implementation of Common Axiom Systems and Proof Generation"* (link)

**SUMMER 2018** Boston

- Implemented group theory, boolean and integer algebra, and predicate logic in *Mathematica*
- Demonstrated relative feasibility of certain hypothetical axiom systems

**IB Extended Essay** – *"Evaluation of Optimization Algorithms for ML Applications"*

**SPRING 2019**

- Implemented optimization algorithms with Numpy, Scipy libraries in Python

*Yokohama, Japan*

## LEADERSHIP

**Lambda Phi Epsilon**, Duke Associate Chapter, **Treasurer**

- Orchestrated 20-year chapter alumni anniversary event with Hilton Hotel banquet and school administration, for the Largest Asian-American interest fraternity in the U.S.

**Temptasians Acapella Group**, VP, **Treasurer**

- Spearheaded group revitalization post-Covid-19, leading events, performances and communication

## PROJECTS

**Homelab project** with ESXi and later Debian & KVM, with second-hand server parts

Maintained services such as local DNS, OpenVPN, Apache web server for personal website

## SKILLS

Contribution to **rust-coreutils** as part of OSS contribution and personal interest in Rust language design

Proficient in **Rust** (Open source software contribution), **C** (Coursework), **Python** (ML/LLM, Scientific

Computing), **Mathematica** (Research), **Javascript** with **React & Angular** (Work experience)

## LANGUAGES

Fluent in **Photoshop & Illustrator** (Work experience), **Excel** (Work experience)

Fluent in **English** (TOEFL: 119/120, IELTS: 8.5/9), **Japanese** (JLPT N-1: 175/180), **Korean** (Native Speaker)

Basic skills in **Chinese** (2 years coursework)