Education

Pyokyeong Son

website: pyoky.me / pyokyeong.son@duke.edu
Duke University; Durham, NC, USA

DUKE Bachelor of Science, Computer Science;

UNIVERSITY Bachelor of Science, Economics (Double Major);

CLASS OF 2025

Certificate in Philosophy, Political Science and Economics

Durham, NC

Cum. GPA: 3.64 of 4.0 / Sem. GPA: 4.0

Coursework:

- CS: Algorithms, Formal Languages, Architecture
- Math: Linear Algebra, Multivariable Calculus, (Non-Bayesian) Statistics, Probability;
- Economics: Micro- & Macroeconomics with Calculus, Asset & Risk Management., Distributive Justice
- Liberal Arts: Renaissance Art & History, Marxism, Distributive Justice

SAINT MAUR IB Bilingual Diploma, for native-level Japanese and English

CLASS OF 2019

INT'L SCHOOL GPA: 4.77 of 4.5 / AP 8 Subjects / IB: 42/45

Yokohama, Japan

Award of Academic Excellence and Leadership (awarded to one student in graduating class)

President of High School Student Council, President of Robotics Club (VEX competition), Varsity Basketball

Experience Practical work and research in UI/UX Design, Theoretical CS/Math, Technical Projects

WORK Rep. of Korea Navy Interpretation Officer

NOV 2020 - JUL 2022

- Appointed liaison officer in Submarine Force Command, Jinhae, South Korea Jinhae, South Korea
- Lead interpretation for US-ROK Command Post Training (CCPT) exercises, joint submarine exercises
- Managed visiting crew from U.K., U.S., Indonesia, Germany for technical submarine tours

INTERNSHIP Cydoc Medical Notes – Front End & Graphic Design Intern

SUMMER 2020

- Oversaw a front-end overhaul with Javacript, React and Semantic-UI front-end; Durham, NC achieved performance enhancements and increased usability
- Produced UI redesign with supporting branding guidelines & logo; redesign was adopted for final launch product

KKMani's Sprout Team – Financial News on Renewable Energy

SUMMER 2019

- Spearheaded a full rewrite of a cross-platform email framework with HTML & CSS, Tokyo, Japan leading to enhanced client-side compatibility and standard adherence
- Designed branding guidelines & logo to increase readership as well as a website serving as a new landing page

WRITTEN WORK Wolfram Research Summer Program – "Exploration of Fundamental Maths via

SUMMER 2018

Implementation of Common Axiom Systems and Proof Generation" (link)

Bently Univ., Boston

- Implemented group theory, boolean and integer algebra, and predicate logic in Mathematica
- Automatically derived proofs for basic theorems in each field within *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

FALL 2022 - PRESENT

- 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.

High School Student Council, President

2018 - 2019

- Organized inter-school sports and social events in Tokyo's international school association: Kanto Plain Association of Seconday Schools (KPASS)
- Spearheaded improvements in school administration in grading policy, class regulation

DESIGN Personal Website with Svelte library; @Bezold_Logo Instagram page. Logo and branding; Duke Chronicle's PROJECTS segment. "Duke Universi-tea." Logo design; Walk for Wuhan coronavirus philanthropy event. Logo and branding.

PROJECTS

- **TECHNICAL Homelab project** with <u>ESXi</u> and later <u>Debian</u> & <u>KVM</u>, with second-hand server parts
 - Maintained services such as local <u>DNS</u>, <u>OpenVPN</u>, <u>Apache</u> web server for personal website
 - Personal website with hand-written HTML & CSS; conforms to HTML 2.0
 - Contribution to **rust-coreutils** as part of OSS contribution and personal interest in <u>Rust</u> language design

Skills

TECHNICAL SKILLS Proficient in Rust (Open source software contribution), C (Coursework), Python (ML, Scientific Computing), Mathematica (Research), Javascript with React (Work experience) Fluent in **Photoshop & Illustrator** (Work experience), **Excel** (Work experience)

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