

DUKE UNIVERSITY	<b>Bachelor of Science, Computer Science;</b> <b>Bachelor of Science, Economics</b> (Double Major); <b>Mathematics Minor</b> ; Foreign Lang. <b>Chinese</b> (2 yrs); <b>GPA: 3.82/4.0</b> ; Selection of coursework: <b>Durham, NC</b> <ul style="list-style-type: none"> <li>- Math: <i>graduate</i> Mathematical Finance &amp; Derivatives; <i>undergrad</i> Stat. Inference, Lin. Alg., Mult. Calc.</li> <li>- CS: <i>graduate</i> Deep Learning, Algorithmic Game Theory; <i>undergrad</i>. Databases, Advanced Algorithms</li> <li>- Economics: <i>graduate</i> Mathematical Finance &amp; Derivatives; <i>undergrad</i>. Econometrics, Macro &amp; Micro</li> </ul>	<b>CLASS OF '25</b>
WORK & INTERNSHIP	<u>Currently at <b>Nomura Securities</b>, Risk Engine Developer</u> <ul style="list-style-type: none"> <li>- Large-scale <b>quantitative risk management (VaR, ES, etc.)</b> data pipelines (ETL)</li> <li>- In <b>Python (NumPy, Dask, Prefect)</b>, Interfacing <b>Quant Libraries (C++)</b></li> <li>- <b>Machine Learning</b> for Risk VaR Prediction (cost reduction)</li> </ul> <p><b>Nomura Securities</b> Market Risk Engines – <i>Intern</i></p> <ul style="list-style-type: none"> <li>- Groundbreaking division's LLM use in risk analysis through CoT reasoning, ReAct agent and tool-use.</li> <li>- Automated fund report performance/quant extraction from reports using RAG and vision</li> <li>- Wrote libraries interfacing LLM and OLAP/SQL DBs, automating risk analysis tasks</li> </ul> <p><b>Hitachi Social Information Solutions</b> – <i>Full-time Intern</i></p> <ul style="list-style-type: none"> <li>- Spearheaded administration front-end development (Angular) for Hitachi's Public Biometric Infrastructure initiative. Client was Japanese local government.</li> <li>- Strengthened communication between developer and client with combined dev. and pros. mgmt. skills</li> </ul> <p><b>Rep. of Korea Navy Interpretation Officer</b></p> <ul style="list-style-type: none"> <li>- Lead interpretation for US-ROK Command Post Training (CCPT) exercises</li> <li>- Managed visiting crew from U.K., U.S., Indonesia, Germany for technical submarine tours</li> </ul> <p><b>Cydoc Medical Notes</b> – <i>Front End &amp; Graphic Design Intern</i></p> <ul style="list-style-type: none"> <li>- Oversaw a front-end UI overhaul with Javascript, React and Semantic-UI, with supporting branding guidelines &amp; logo; adopted for final launch product</li> </ul> <p><b>KKMani's Sprout Team</b> – <i>Financial News on Renewable Energy</i></p> <ul style="list-style-type: none"> <li>- Spearheaded a full rewrite of a cross-platform email framework with HTML &amp; CSS, leading to enhanced client-side compatibility and standard adherence</li> </ul> <p><b>Wolfram Research Summer Program</b> – <i>"Exploration of Fundamental Maths via Implementation of Common Axiom Systems and Proof Generation"</i> (link)</p> <ul style="list-style-type: none"> <li>- Implemented group theory, boolean and integer algebra, and predicate logic in <i>Mathematica</i></li> <li>- Demonstrated relative feasibility of certain hypothetical axiom systems</li> </ul>	<b>SUMMER '24 NYC</b>
WRITTEN WORK	<b>TAZNs Acapella Group, VP (1yr.), Treasurer (1yr.)</b>	<b>NOV '20 - JUL '22</b>
LEADERSHIP	<b>Lambda Phi Epsilon</b> , Duke Associate Chapter, <b>Treasurer (2yrs.)</b>	<b>Jinhae, South Korea</b>
PROJECTS	<b>Homelab project with Debian/Arch Linux, ESXi &amp; Proxmox</b> , with second-hand server parts	<b>SUMMER '19 Tokyo</b>
SKILLS	Maintained services such as local <u>DNS</u> , <u>OpenVPN</u> , <u>Apache</u> web server for personal website	<b>SUMMER '18 Boston</b>
LANGUAGES	Contribution to <b>rust-coreutils</b> as part of OSS contribution and personal interest in <u>Rust</u> language design	
	Proficient in <b>Python</b> (ML in PyTorch, Data Analysis in Prefect, Pandas), <b>C &amp; ARM Assembly</b> (Coursework), <b>Mathematica</b> (Math Research), <b>JavaScript/TypeScript with React &amp; Angular</b> (Work experience)	
	<b>MinIO, Nexus, CI/CD, Advanced SQL, Apache Avro, Parquet formats, Linux Internals</b>	
	Fluent in <b>Photoshop &amp; Illustrator</b> (Work experience), <b>Excel</b> (Advanced work experience)	
	Fluent in <b>English (TOEFL: 119/120, IELTS: 8.5/9)</b> , <b>Japanese (JLPT N-1: 175/180)</b> , <b>Korean (Native Speaker)</b>	
	Basic skills in <b>Chinese</b> (2 years coursework)	