Kevin Shao

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EDUCATION

Massachusetts Institute of Technology, Cambridge, MA — Expected Graduation: **June 2023**

- **Major**: Candidate for Bachelor of Science in Computer Science — GPA: **5.0**/5.0
- **Relevant Coursework**: Fundamentals of Programming, Analysis of Algorithms, Machine Learning, Linear Optimization, Autonomous Racecar Robotics

Lawrenceville School, Lawrenceville, NJ — *Fall 2015 – Spring 2019*

- **Honors**: High Honors, AP Scholar with Honors, Hutchins Scholar

Princeton University, Princeton, NJ — *Fall 2017 – Spring 2019*

- Courses: Honors Analysis, Honors Linear Algebra, Combinatorics

RELEVANT EXPERIENCE

Google – STEP Intern (Virtual) — *June – September 2020*

- Designed and implemented a web application to facilitate communication on college campuses using HTML, CSS, JavaScript, and Java
- Integrated with 5 Google API's, including Calendar and Gmail
- Executed full project lifecycle, including design review, UX review, and user feedback

MIT Geometric Data Processing Group – Undergraduate Researcher — *May 2020 – Present*

- Researching and proposing algorithms for 3D multiview point cloud registration
- Integrating with pipeline to reconstruct 3D models from partial LIDAR scans
- Using PyTorch, Open3D, and Minkowski Engine to implement machine learning models for registration

Daiwa Steel Tube Industries – Extern — *January 2020*

- Developed software in Java to automatically generate reports from speech data — *Tochigi, Japan*
- Curated voice data to improve voice recognition model, accounting for Japanese factory jargon
- Achieved ~90% accuracy on prototype model

Phylogeny Tool – Personal Project (Ongoing) — *June 2019 - Present*

- Developing software with Java to streamline and aid the phylogenetic process from the Hutchins Scholars program
- Employing graph theory to combine reads generated from PCR

Handwriting Recognition Neural Network – Personal Project — *June – August 2018*

- Implemented artificial neural network from scratch in Java
- Achieved 94% success rate in classifying handwritten digits from MNIST dataset

EXTRACURRICULAR ACTIVITIES

MIT Varsity Lightweight Crew — *Fall 2019 – Present*

- Member of MIT's Varsity Lightweight Crew Team
- Practice and compete for 15+ hours per weeek

Hutchins Scholars — *Royal Botanical Garden Edinburgh* — *June 2018 – August 2018*

- Created evolutionary trees for 107 species of Carribean Gesneriaceae
- Sequenced and analyzed DNA data through Polymerase Chain Reaction (PCR) techniques, as well as parsimony analysis

The Lawrence – Web Editor — *Lawrenceville School* — *April 2017 – March 2019*

- Managed, updated, and expanded the website for *The Lawrence*, the school paper.
- Used PHP, MySQL, JavaScript HTML, and CSS to add features to the website and streamline the weekly upload process
- Implemented features such as online polling, an admin interface, and a tool for faculty approval

SKILLS AND INTERESTS

Skills: Java, Python, PyTorch, NumPy, PHP, JavaScript, MySQL, Git
Interests: Poker, Chess, Music Composition, Swimming, Cycling