Nishant Mishra

Harvard Computer Science & Statistics Student

Email: nmishra@college.harvard.edu
Phone: +1-609-580-9054
GitHub: nmishra459
LinkedIn: in/nmishra2024/
Website: nmishra459.github.io

Education

Harvard University *Cambridge, MA*
Bachelor of Arts - AB, Computer Science & Statistics *2020 - 2024*
Selected Coursework - Data Structures & Algorithms, Differential Privacy (graduate level), Machine Learning (*MIT dual-enrollment*), Systems Programming & Machine Organization, Linear Models, Data Science in Social Science, Intro. Data Science, Probability Theory, Statistical Inference | *Extracurriculars* - Arete Fellowship (Harvard Effective Altruism), Group for Undergrads in Statistics at Harvard (Director of Membership), Harvard Computer Society (Member)

Technical Skills

Programming: Python (*4 yrs*), Java (*4 yrs*), C++ (*2 yrs*), JS (1 yr)
Markup/Style: HTML/CSS (*2 yrs*), LaTeX (3 yrs)
Query: SQL (*1 yr*)

Technologies: NumPy, Pandas, React, Flask, PyTorch, Keras
Applications: MATLAB, LabVIEW, UiPath
Tools: Git, Linux, Unix, Mixpanel, Heroku

Work Experience

Amazon Web Services (AWS) *Boston, MA*
Software Engineering Intern | Elastic Block Store - Data Services *Sept. 2022 - Present*

Palantir Technologies *Washington D.C.*
Software Engineering Intern | Gotham Platform - Browser Extension Development *May 2022 - Aug. 2022*
• Worked under a product VP on a bounty-based, browser extension project. Technical details availble upon request.

Harvard School of Engineering and Applied Sciences *Cambridge, MA*
Course Assistant | CS50 - Introduction to Computer Science *Sept. 2021 - Dec. 2021*
• Hold two hour-long weekly tutorials, staff office hours, grade quizzes/exams, and assist students on problem sets.
• CS50 is Harvard's largest course with 700+ enrolled students; topics include C, Python, memory, data structures, SQL, and web programming (HTML/CSS, JS, Flask). Offered position after receiving the 5th highest final exam score in Fall '20 .

Harvard Institute for Applied Computational Science *Cambridge, MA*
Research Intern | StellarDNN Group - Deep Learning in Astrophysics *May. 2021 - Aug. 2021*
• Utilized recurrent convolutional neural networks (Python, PyTorch) to accept a black hole's physical parameters to generate synthetic images; tested using high-resolution images to infer the input back with 98% accuracy.
• Worked with researchers at IACS and the Center for Astrophysics (CfA) to document and propose imaging design recommendations for the Event Horizons Telescope (EHT) Collaboration's upcoming black hole imaging facilities.

Glimpse (Y Combinator, Winter 2020) *San Francisco, CA*
Product Management Intern | Growth Team - Product Design & Market Research *Feb. 2021 - May. 2021*
• Mapped out feature usage trends (Mixpanel) on *Glimpse Events*, a video chat platform with 110k+ registered users, to identify points of weakness in the app's one-on-one matching structure, overseeing a ~30% increase in users in Spring '21.
• Conducted UI/UX interviews to write product req. docs. for *Glimpse Groups*, a community events planning platform.
• Proposed and tested feature sets for Heyyo Chat, a messenger app part of the initial launch cohort of Zoom Apps.

Biopticon *San Francisco, CA*
Software Engineering Intern | Medical Imaging Initiative - Depth Scanning Technology *Sept. 2021 - Dec. 2021*
• Modified Intel's RealSense SDK scripts (Python) to let users capture stereo-camera depth maps with Bash commands.
• Constructed and utilized a StereoPi module to image various tumor-like objects. Minimized image noise (MATLAB) to tailor the module's software parameters (Python) to operate in tandem with tumor-imaging equipment.

Career Programs & Personal Projects

Jane Street *Manhattan, NY | Remote*
First-Year Trading and Technology Program (FTTP) | Github Repository: https://bit.ly/3dbtAyb *March 2021*
• Selected as 1 of 60 college freshmen to learn more about Jane Street's quantitative trading and technology models.
• Programmed a market trader bot (Python) that utilized TCP connections (Bash), the known fair prices of bonds, and discrepancies in the pricing of securities to generate profit in a simulated financial exchange.
• Automated trader bot placed in the top 8 at Jane Street's 2021 FTTP Electronic Trading Competition (ETC).

Catch 21: Dice *Cambridge, MA*
CS50 Final Project | Github Repository: https://bit.ly/3oXrXI6 *Dec. 2020*
Worked with a classmate to design a web application (Flask, Jinja, Python) that features a two-player dice game (JavaScript), along with a personalized stats page and global leaderboard ranking all registered users (SQL). Front-end designed with HTML5/CSS and Bootstrap 4. Deployed on Heroku (*https://catch-21-dice.herokuapp.com/login*).