Shounak Ghosh

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Education

New York University, Tandon School of Engineering, Brooklyn, NY — May 2026
B.S. Computer Science, GPA: 4.0
Relevant Coursework: Data Structures, Algorithms, Data Analysis, and Linear Algebra

FourthBrain.ai, Machine Learning Engineering Program — August 2022
Relevant Topics: Computer Vision, Object Detection, NLP, Auto-ML, ML-Ops

Stanford University (Coursera), Graph Algorithms & Specializations — May 2019

Technical Skills

Coding Languages:	Python, Java, C++, HTML, CSS, JavaScript, React.js, NodeJS
Machine Learning:	Tensorflow, Keras, PyTorch, OpenCV, Scikit, Seaborn, MatPlotLib, Pandas, Numpy, MediaPipe
Other Tools:	Fusion360, Cura, Revit, Mathematica, Gretl, LaTeX, Word, Excel

Work Experience

Software Engineeering Intern: Oloid.ai, San Jose, CA — Summer 2021, 2022

- Built image classifier for 13+ types of RFID badge scanners with 98% accuracy, used for easy identification and integration with Oloid's trademark keyless scanner
- Used Tensorflow-Keras pipeline with data tuning and augmentation, React.js frontend for real-time image classification
- Built AI liveness detection model for user authentication in contactless-identification environment
- Used Python, C++, and Google's MediaPipe facial recognition repository

Team Member: Jamba Juice, San Jose, CA — Summer 2021

- Managed fluctuating customer queue while providing personalized experiences as part of a dynamic service team
- Exhibited thorough knowledge of food and beverage menu and upsold to 75% of customers daily

Academic Projects

Optimized Context-Aware Defenses for Image Classifiers — Summer 2021

- Surpassed predetermined adversarial-resistance benchmarks via combination of 10 unique black & white-box models

Developed EKG Classifier Resistant to Adversarial Attacks — Summer 2020

- Augmented state-of-the art 34-layer EKG classifier to provide accurate results when given adversarial (malicious) data
- Implemented using Google Colab and 2017 Computing in Cardiology dataset (PyTorch)

Computer Architecture — Fall 2020

- Designed finite-state machines, multiplexers, Karnaugh maps, and implemented using logic gates on breadboard

Neural Networks — Spring 2020

- Built an N-layer Perceptron model from scratch capable of image recognition (Java)

Compilers & Interpreters — Fall 2019

- Built compiler for the Pascal language and interpreter for arbitrary context-free grammar

Leadership Experience

1072 Harker Robotics – Electrical Subteam Director — Fall 2018 - 2022

- Coordinated workdays and delegated tasks between underclassmen leads, parent volunteers, and newer members
- Gained experience in robot design, electrical wiring, machining parts, mechanical assembly, and woodwork
- Helped organize and volunteered at outreach summer robotics camp

Silicon Valley Bike Exchange — Summer 2021

- Mentored incoming volunteers on basic bike repair techniques and collected used bike donations via NextDoor
- 80 volunteer hours with over 50 bikes repaired and 15 donations collected over 3-month period

Inspirit AI Ambassador – Top 10 Fellow — Summer 2021

- Conducted outreach providing AI learning resources to multiple schools, clubs and communities over a 5-week period
- Presented to 40+ individuals about the importance of ethics in AI and the diversification of datasets and researchers

Honors

- Presidential Service Award — Fall 2021
- Synopsys Regional Fair, Computational Biology Category, Honorable Mention — Spring 2021
- United States Physics Olympiad Semifinalist — Spring 2021
- Tests of Engineering, Aptitudes, and Science (TEAMS) 3rd in CA — Spring 2020