

# Shounak Ghosh

(669) 273-9966 • shounak.ghosh@nyu.edu • [linkedin.com/in/shounak-ghosh](https://www.linkedin.com/in/shounak-ghosh) • <https://github.com/shounak-ghosh>

## Education

<b>New York University</b> , Tandon School of Engineering, Brooklyn, NY B.S. Computer Science, GPA: N/A <i>Relevant Coursework: Data Structures, Algorithms, Data Analysis, and Linear Algebra</i>	May 2026
<b>FourthBrain.ai</b> , Machine Learning Engineering Program <i>Relevant Topics: Computer Vision, Object Detection, NLP, Auto-ML, ML-Ops</i>	August 2022
<b>Stanford University (Coursera)</b> , 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

<b>Software Engineering Intern: Oloid.ai</b> , San Jose, CA	Summer 2021, 2022
<ul style="list-style-type: none"><li>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</li><li>Used Tensorflow-Keras pipeline with data tuning and augmentation, React.js frontend for real-time image classification</li><li>Built AI liveness detection model for user authentication in contactless-identification environment</li><li>Used Python, C++, and Google's MediaPipe facial recognition repository</li></ul>	
<b>Team Member: Jamba Juice</b> , San Jose, CA	Summer 2021
<ul style="list-style-type: none"><li>Managed fluctuating customer queue while providing personalized experiences as part of a dynamic service team</li><li>Exhibited thorough knowledge of food and beverage menu and upsold to 75% of customers daily</li></ul>	

## Academic Projects

<b>Optimized Context-Aware Defenses for Image Classifiers</b>	Summer 2021
<ul style="list-style-type: none"><li>Surpassed predetermined adversarial-resistance benchmarks via combination of 10 unique black &amp; white-box models</li></ul>	
<b>Developed EKG Classifier Resistant to Adversarial Attacks</b>	Summer 2020
<ul style="list-style-type: none"><li>Augmented state-of-the art 34-layer EKG classifier to provide accurate results when given adversarial (malicious) data</li><li>Implemented using Google Colab and 2017 Computing in Cardiology dataset (PyTorch)</li></ul>	
<b>Computer Architecture</b>	Fall 2020
<ul style="list-style-type: none"><li>Designed finite-state machines, multiplexers, Karnaugh maps, and implemented using logic gates on breadboard</li></ul>	
<b>Neural Networks</b>	Spring 2020
<ul style="list-style-type: none"><li>Built an N-layer Perceptron model from scratch capable of image recognition (Java)</li></ul>	
<b>Compilers &amp; Interpreters</b>	Fall 2019
<ul style="list-style-type: none"><li>Built compiler for the Pascal language and interpreter for arbitrary context-free grammar</li></ul>	

## Leadership Experience

<b>1072 Harker Robotics – Electrical Subteam Director</b>	Fall 2018 - 2022
<ul style="list-style-type: none"><li>Coordinated workdays and delegated tasks between underclassmen leads, parent volunteers, and newer members</li><li>Gained experience in robot design, electrical wiring, machining parts, mechanical assembly, and woodwork</li><li>Helped organize and volunteered at outreach summer robotics camp</li></ul>	
<b>Silicon Valley Bike Exchange</b>	Summer 2021
<ul style="list-style-type: none"><li>Mentored incoming volunteers on basic bike repair techniques and collected used bike donations via NextDoor</li><li>80 volunteer hours with over 50 bikes repaired and 15 donations collected over 3-month period</li></ul>	
<b>Inspirit AI Ambassador – Top 10 Fellow</b>	Summer 2021
<ul style="list-style-type: none"><li>Conducted outreach providing AI learning resources to multiple schools, clubs and communities over a 5-week period</li><li>Presented to 40+ individuals about the importance of ethics in AI and the diversification of datasets and researchers</li></ul>	

## Honors

<ul style="list-style-type: none"><li>Presidential Service Award</li></ul>	Fall 2021
<ul style="list-style-type: none"><li>Synopsys Regional Fair, Computational Biology Category, Honorable Mention</li></ul>	Spring 2021
<ul style="list-style-type: none"><li>United States Physics Olympiad Semifinalist</li></ul>	Spring 2021
<ul style="list-style-type: none"><li>Tests of Engineering, Aptitudes, and Science (TEAMS) 3<sup>rd</sup> in CA</li></ul>	Spring 2020