

Ishaan Thakur

CONTACT INFORMATION	Email: it233@cornell.edu Web: ishaanthakur.github.io	LinkedIn: linkedin.com/in/ishaanthakur Github: github.com/ishaanthakur
EDUCATION	Cornell University , Ithaca, NY <i>B.S., Electrical and Computer Engineering; Minor, Computer Science</i> Exp. Dec 2020 Relevant Coursework: Algorithms, Machine Learning, Operating Systems, Embedded Systems, Networks, Competitive Programming, Data Structures, Discrete Math, Digital Signal Processing, Computer Architecture, Linear Algebra and Differential Equations.	
PROFESSIONAL EXPERIENCE	On Pepper New York, NY <i>Software Engineer Intern</i> Mar 2020 – present <ul style="list-style-type: none">Developing ML models for a robust Asset Management System. ESnet, Lawrence Berkeley National Lab San Francisco, CA <i>Software Engineer Intern - Scientific Network Team</i> May 2019 – Jun 2019 <ul style="list-style-type: none">Developed a tool for visualizing high-speed network packets received from network adapters.Programmed telemetry collector in Golang and setup WebSocket connections for handling 100 Gbps transfer of telemetry data.Stored real-time network packets using InfluxDB and monitored packet loss using Grafana. Autonomous Systems Lab, Cornell University Ithaca, NY <i>Undergraduate Research Assistant</i> Sep 2018 – Nov 2018 <ul style="list-style-type: none">Developed a MATLAB interface for receiving beacon information and range estimation over WiFi from an IRobot Create2 platform with an accuracy of 87%. Swarm Robotix (Nokia Bell Labs) Naperville, IL <i>Software Engineer Intern - Sensor Software and Controls Team</i> May 2018 – Jul 2018 <ul style="list-style-type: none">Created a localization system for autonomous mobile robots in C++ and implemented visual SLAM for mapping unknown environment.Used A* / Dynamic Window Approach Algorithms with formation control to improve existing path planning solution by 20%. WaggleNet, UIUC Champaign, IL <i>Undergraduate Research Assistant</i> Mar 2018 – May 2018 <ul style="list-style-type: none">Built a data-logger in Arduino that reads and displays data from various sensors in a mesh network with an accuracy of more than 95%.Developed an Identity Access Management system to support email verification and password recovery on the website. BioSensors Lab, UIUC Champaign, IL <i>Undergraduate Research Assistant</i> Mar 2018 – May 2018 <ul style="list-style-type: none">Researched and integrated different sensors with GPS in an underwater camera module and refined C++ code improving latency of polarization data obtained at different depths/times of day by 5%. HexNest, Inc. Urbana, IL <i>Co-Founder and Safety Researcher</i> Mar 2018 – May 2018 <ul style="list-style-type: none">Built visualization tools for safety testing of gymnastic mats. Improved Safety by 62%.Pitched the product in several startup ventures such as iVenture Accelerator Program.	
PERSONAL PROJECTS	Change Me: A Chrome Extension that allows users to edit any web page and take its screenshot. Tweet Sentiment Analysis: Used Tweepy API to score user's twitter tweets and visualized data. Cornell Chatbot: Implemented Tensorflow's Sequence to Sequence model to train a chatbot on Cornell's Movie Dialogue Dataset.	
PROGRAMMING EXPERIENCE	<i>Languages:</i> Proficient: Java, C++, Python Familiar: C, HTML, CSS, JavaScript, Verilog <i>Tools:</i> Git, L ^A T _E X, Cloud (AWS, Firebase), Big Data (Kafka, Spark), Databases (MongoDB, InfluxDB, MySQL), Web (Node.js, React, P5.js), Machine Learning (NumPy, SciPy, Scikit Learn)	
AWARDS + INVOLVEMENT	Dean's List (2017-19); Second Place, Cornell Robotics Competition (2019); First Place, ECE Pulse Design Competition (2018); First Place, Innovation Idea fair, UIUC (2017); Top 5 teams, Northwestern Hackathon (2017); IEEE (2017 – Present); ACSU (2018 – Present)	