

# Eliot Brown

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| <https://www.hackerrank.com/ecb465> |

**Summary:** Sophomore student studying Computer Engineering with three semesters of research experience who is eager to learn and able to develop skills quickly. Passionate about ethics of tech and the capabilities of machine learning.

## EDUCATION

### NEW YORK UNIVERSITY TANDON SCHOOL OF ENGINEERING

JANUARY 2019 - MAY 2022

BS/MS Accelerated Program, Computer Engineering; Minors: Business Studies, Integrated Digital Media

GPA: 3.65/4.00

**Relevant Coursework:** Data Structures & Algorithms (Python), Object Oriented Programming (C++), Databases (SQL), Introduction to Circuits, Multi variable Calculus, Linear Algebra & Differential Equations

**Clubs:** NYU Self Drive, Machine Learning Club, Cybersecurity (OSIRIS), Soccer

## EXPERIENCE

### New York University: Summer Undergraduate Research Assistant

Brooklyn, New York

Professor Li Jin: Civil & Urban Engineering C2SMART Lab

May 2019 - August 2019

- **Purpose:** Ran mathematical simulations for the stability predictions in network links. Derived mathematical algorithms for more precise and reliable GPS routing systems. Made graphs using Python. Learned LaTeX to format the paper.
- **Pending Publication:** Resilience of Dynamic Routing over Parallel-Link Networks against Recurrent and Random Sensing Faults
- **Presentation:** NYU Undergraduate Summer Research Exposition. Presented findings of algorithmic based stability analysis of transportation links.

### University of Connecticut: Research Assistant

Storrs, CT

Professor Zbigniew Bzymek: Prevention Engineering

September 2018 - January 2019

- **Purpose:** Created a basis for a new branch of engineering called Prevention Engineering. This major would focus in preventative steps taken when implementing and forming new technology based on ethics, future consequences, and overall efficiency.
- **Co-writer/editor:** Prevention Engineering Presentation at the IMECE (International Mechanical Engineering Congress & Exposition)
- **Pending Publication:** Introduction of Prevention Engineering In Technology and Design Curriculum, in progress.

### University of Connecticut: Research Assistant

Storrs, CT

Professor Joanne Conover: Physiology and Neurobiology Lab: Hydrocephalus Research

December 2017 - March 2018

- **Purpose:** Completed 3-D renderings of lateral brain ventricle volumes using programs such as ITK Snap, Brain Suite, and 3-D Slicer. Separated the skull from the brain as well as the lateral ventricles from brain tissues in imaging. Used to create trends in ventricle measurements and appearances in infants with hydrocephalus.
- **Accepted Punishment:** Spatiotemporal Characterization of the Ventricular-Subventricular Stem Cell Niche During Normal Brain Development, submitted to the journal, DEVELOPMENT

## SKILLS & INTERESTS

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| • <b>Languages:</b> Python, C++, SQL, LaTeX, HTML, CSS   | • <b>Programs:</b> Github, Fusion 360, ITK Snap, Brain-Suite, 3D Slicer, Solid Works CAD |
| • <b>Interests:</b> Computer Vision, Machine Learning, Cybersecurity, Renewable Energy, Software Engineering, Ethics | • <b>Other Skills:</b> Public Speaking, Communication, Initiative, Leadership            |

## ACTIVITIES & PROJECTS

- **HackNYU - NYU Hackathon 2019:** Team of four coded <http://beecareful.org/> to track what websites and applications do with users data. It was made as central platform for common users to understand the tracking of their data. Users can submit information about sites activities, cite their information, and build a reliable reputation. Won MLH Sponsorship for best use of their domain.
- **NYU Self Drive:** Participating on the Computer Science sub-team on Self Drive. Currently I am using the MuSHR platform to adjust the vehicle to be interactive with its surroundings using Python.
- **Bomb Defusing Robot 2019:** Led a team to create an autonomous robot that could navigate a terrain while avoiding obstacles and returning an object.
- **Volunteer:** Habitat for Humanity: Helped organize and preserve a shop that stores materials for those in need.
- **Resume:** Created this Resume using LaTeX. Learned formatting as well as serves as good practice.
- **DECA Senior Vice President 2017- 2018:** Organized events and raised hundreds of dollars for local families in need