

Thomas Ottaway

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EDUCATION

- **Brown University** Providence, RI
 - *Applied Math-Computer Science* *Expected Graduation May 2022*
 - Coursework: CSCI 0190 Accelerated Introduction to Computer Science, APMA 0350 Applied ODE's, APMA 1360 Applied Dynamical Systems, APMA 1160 Introduction to Numerical Optimization, CS 0220 Discrete Math, PHYS 0070 Analytical Mechanics, CHIN 0100, and CHIN 0200 Basic Chinese
- **Albany High School** Albany, NY
 - *Advanced Regents Diploma* *Sept. 2014 – June 2018*
- **Other**
 - Independent reading of computer vision research papers (primarily ResNets and variations such as Wide ResNets, Stochastic Depth, Pyramid nets etc.)

WORK EXPERIENCE

- **NYS ITS/DOH (Django, JavaScript, HTML, CSS)** Albany, NY
 - *Student Assistant* *Summers 2018-2019*
 - Developed scripts for automated regression testing
 - Re-imagined and prototyped systems for patient testing in the event of an outbreak (motivated by the shortcomings of NYS's response the Zika outbreak)
 - Built multiple automated systems for HL7 message generation to expand Remote Order Entry accessibility
 - Explored progressive web apps as a precaution against network failures
- **LingView (JavaScript, Node.js, React)** Brown University
 - *Developer* *Sept. 2018 - Present*
 - Working with extensive preexisting code-base
 - Collaborating with other students and faculty to determine project goals and priorities
 - Exploring search technologies such Fuse, LUNR, and SOLR and determining the most appropriate tool

PROJECTS

- **Autonomous Fixed Wing Plane** *May. 2019 - Present*
 - Learned concepts in control theory and robotics by developing software to fly a fixed wing plane
- **Rocket Stabilization** *Apr. 2019 - May 2019*
 - Applied techniques from the field of dynamic systems to study the stability of various rocket control systems (final paper can be found on github)
- **Exploring Numerical Methods (Python)** *Oct. 2018 - Apr. 2019*
 - Exploring algorithms for finding numerical approximations to differential equations using Python's numpy library
 - Learning more about plotting using matplotlib, including visualizations for the 3-d wave equation and the behavior of particles in chaotic systems

SKILLS

- **Programming Languages/Frameworks** : Python, JavaScript, CSS, SQL, MATLAB, L^AT_EX, Django, PyTorch, Pyret, Racket, Flask, Node, React
- **Pair programming**: Extensive experience pair programming, working with others to formulate approaches, catch bugs, and write code.

ACTIVITIES

- Juggling (up to five objects), blues/swing dancing, cycling, running, music (clarinet and piano)