# ALEXANDER LI alexfieldli.com

#### **Education:**

#### **Cornell University –** B.S. in Electrical and Computer Engineering

August 2016 - present

Cumulative GPA: 4.043 | Dean's List: Fall '16, Spring '17, Fall '18, Spring '18

Expected May 2020

Cornell Rocketry Team | Cornell Undergraduate Asia Business Society | Undergraduate Researcher |
Cornell Photo Society | Engineering Orientation Leader

#### Tappan Zee High School - High School Diploma

September 2012 - June 2016

- Valedictorian | Varsity Tennis Captain for 3 years | Peer Leader
- **Tutor Team:** Founded a student organization that provides free tutoring to the local community. Recruited over 70 tutors to the team. Created a website that helped match over 100 students to compatible tutors

## Work Experience:

#### **The Blackstone Group** – *Software Development Intern*

May 2018 – August 2018

- Delivered a system that allows management to visualize and quantify trends in the firm's productivity
- Designed data models and schemas to organize and store productivity data gathered using REST APIs
- Optimized existing data collection procedures to reduce execution time by 90%
- Visualized data using Tableau and created dashboards for automated reporting of company productivity
- Deployed code to production servers by setting up a deployment pipeline using TeamCity
- Project was well received by the CTO and leadership team, resulting in discussions to expand the system to incorporate more data related to company performance

#### **Lockheed Martin** – NASA Space Grant Summer Intern

June 2017 - August 2017

- Part of a three-intern team which developed from scratch a "battle-bot" rover to illustrate robotics concepts for Lockheed Martin student outreach programs
- Gained hands-on experience with embedded systems development by programming and integrating Arduino microcontrollers to operate motors, servos, and IR sensors
- Developed and shipped apps to the iOS and Android store that control the rover via Bluetooth
- Delivered formal design proposal and reviews, and documented the final product so students could build their own rover

# Campus Experience:

#### **Energy and the Environment Lab** – *Undergraduate Researcher*

January 2017 – present

- Developed a Python application that processes wood smoke emission data by using noise filtering and pattern recognition to quickly determine air pollution levels cutting out the need for expensive lab tests
- Prepared and presented the lab's work at the 2017 American Association of Aerosol Research conference
- Worked with a team to develop a prototype solar-powered air pollution sensor that uses Ithaca's IoT infrastructure to transmit real-time air quality measurements

#### **Cornell Rocketry Team –** *Airframe & Communications Subteam*

September 2016 – May 2018

- Worked on the airframe subteam to design and fabricate a 15 ft. tall vehicle to launch to 5000 ft.
- Managed the recovery system of the entire vehicle, spearheading a change in the team to use less black powder separation charges in favor of safer electronic parachute releases
- Developed the hardware and software for LoRa radios used to track sections of the launch vehicle throughout flight

### **Cornell Undergraduate Asia Business Society** – *Marketing Chair*

September 2016 - present

- Co-organized a fundraiser that raised over \$1500 as part of a new-member education process
- Chosen as the first marketing chair to facelift the organizations brand; responsible for implementing a new logo, increasing publicity around recruitment, and website and Facebook page management

# Skills/Interests/Awards:

- Programming Languages: Java, Python, C, C#, Swift | Development Tools: Eclipse, Visual Studio, Xcode
- **Skills:** Project planning, public speaking, data visualization, communication
- Photography/Graphic design: Photoshop | Lightroom | Cornell Photo Society member
- Filmmaking: Project Yellowlight 2017 winner | National Academy of Engineering E4U3 category winner