#### **EXPERIENCE**

#### CP Consulting, New York, N.Y.

Owner/Mechanical Engineering Consultant Clients: Vkanix, Inc., Piasecki Aircraft Corporation

- Prepare assembly and drawing packages including CAD models, BOMs and wiring schematics
- Perform design studies and component selection for various electro-mechanical projects in development
- Participate in development meetings and publish proposals and progress reports throughout the design cycle

# Piasecki Aircraft Corporation, Essington, P.A.

Mechanical Engineer/Project Engineer

- Led a multi-disciplinary team in the development of preliminary/detailed designs of UAV systems and tooling assemblies
- Acted as liaison between clients, vendors and engineering department for scheduling and construction
- Performed trades and design reviews to guarantee manufacturability and ease of assembly while keeping costs low

# Atair Aerospace, Brooklyn, N.Y.

Mechanical Design Engineer

- Designed multi-component assemblies for manufacture; consulted with suppliers; maintained drawing packages
- Fabricated, integrated, analyzed and flight tested R&D prototypes as necessary both locally and off site
- Formulated assembly manuals, trade studies, test/evaluation and other in-depth reports for clients and IR&D
- Operated as primary machinist in the machine shop for in-house prototype fabrication and shop maintenance

# Tomorrow Lab, New York, N.Y.

Mechanical Engineering Intern

- Brainstormed product concepts with clients and within the company to develop future product plans
- Performed electrical and structural tests for component selection and integration into manufacturing
- Repurposed a 3D printer into a CNC mill able to mechanically route PCBs for prototyping

# Dynamical Systems Laboratory – NYU Polytechnic School of Engineering, Brooklyn, N.Y.

Graduate/Undergraduate Researcher

- Developed UAVs for image capture in large scale surface flow particle image velocimetry studies
- Manufactured and characterized buoyant fluorescent particles for surface water flows studies encompassing PIV
- Designed a brushless motor driven camera gimbal for image stabilization
- Designed a low-cost portable water tunnel with varying slope for in-situ flow visualization studies
- Characterized the response of submerged flexible structures exposed to cyclical torsional and impact-induced vibrations towards realizing possible energy harvesting capabilities
- Designed low-cost setup for visualization of vortex formation over submerged structures

#### **SKILLS**

#### **EDUCATION**

**New York University – Polytechnic School of Engineering**, Brooklyn, N.Y. Master of Science in Mechanical Engineering (GPA: 3.5/4.0)

# New York University – Polytechnic School of Engineering, Brooklyn, N.Y.

Bachelor of Science in Mechanical Engineering, Minor in Aerospace Engineering, Magna Cum Laude, (GPA: 3.6/4.0)

# **ACCOMPLISHMENTS**

Boy Scouts of America:Eagle Scout of Troop 383 (2009), Order of the Arrow Brotherhood MemberAwards/Honors:Best Thesis in Mechanical Engineering (2014), Tau Beta Pi: Engineering Honor Society (2012), Best<br/>Mechanical Engineering Research Experience for Undergraduate Project (2012)

March 2016 - Present

August 2014 – August 2015

October 2015 - October 2016

March 2014 – May 2014

May 2010 - January 2014

January 2014

January 2014