

## Objective

Seeking career advancement in aerospace engineering with applications to computer science while continuing pursuit of Computer Science Graduate degree.

## Engineering Experience

**Pratt & Whitney**, East Hartford, CT

*Propulsion Systems Analysis*

- Modeling & Integration September 2017 – Present
  - Current Bombardier PW1500G NPSS modeling team lead responsible for integration of controls, aero inputs, systems group inputs and effective use of engineering outsource teams to drive organization output
  - Leading process improvement initiative by querying symptomatic tasks with former organization, Performance Analysis, of ~70 engineers by targeting high-impact, low maturity processes as candidates for automation and tool development using knowledge of NPSS, C++, Git and Qt IDE
- Performance Analysis June 2016 – August 2017
  - Applied engine test learning from Embraer geared turbo-fan to assemble Performance Table containing aircraft mission profiles and gas generator thermodynamic expectations for release to engineering community of 4,000+
  - Developed Mitsubishi aircraft power-setting schedules using engine simulation thrust targets and customer guarantees to FAA certify the PW1200G geared turbo-fan engine
- Performance Analysis May 2015 - August 2015
  - Assessed engine performance on Pratt and Whitney's flagship PW1100G-JM engine for the Airbus A320neo
  - Applied in-depth analysis to engine data anomalies using off-design engine matching to declare performance drivers
  - Applied engine performance assessments to request inspections of and dispute aero predicted nacelle performance
  - Recurrent use of NPSS models and influence coefficients to match, validate and predict engine performance

## Education

**Harvard University**, Cambridge, MA

Software Engineering Certificate

Expected Completion: Fall 2018

**University of Connecticut**, Storrs, CT

Bachelor of Science

Major: Mechanical Engineering, May 2016

## Programming & Software Skills

C++, Java, CSS3, HTML5, JS, NPSS, Git

## Undergraduate Design Project

**Pratt & Whitney**, East Hartford, CT - *Sponsored*

September 2015 – May 2016

*Additive Manufacturing with Direct Metal Laser Sintering*

- Investigate support deflection as the source of build failures and predict critical deflection limits
- Conduct experiments at P&W Rapid Prototyping Laboratory to validate analytical predictions

## Undergraduate Research

**Manufacturing Automation & Control Systems Laboratory** – *Professor Xu Chen*

September 2015 – May 2016

*Structured Light Scanning and Applications to Additive Manufacturing*

- Structured Light is a method of scanning surfaces by which patterns of light are projected onto a surface and photographed
- Research includes building a structured light scanner and applying process to the validation phase of additive manufacturing

## Related Undergraduate Courses & Activities

- Aero Propulsion Systems, Fluid Dynamics, Computer Aided Design and Modeling, Design of Machine Elements
- Students for the Exploration and Development of Space (SEDS) - Vice President September 2015 – May 2016