

P.O. Box 88011
Seattle, WA 98138

Paul Soldate
oldbrickbuilding.github.io

pcs23@uw.edu
(707) 478-5950

EXPERIENCE

University of Washington **Doctoral Student**

Dept. of Mechanical Engineering
In Progress

- Pursuing doctoral studies in model-based methods for control systems

Boeing **Systems Engineer**

Boeing Defense, Space, & Security
2022 - 2024

- Developed simulations and testing requirements to collect, process, and analyze real-time data from multiple RF/Electro-Optical/IR systems
- Collaborated with multi-disciplinary teams to develop simulations and deliver data-driven solutions to customers
- Identified knowledge gaps and assessed product functionality
- Presented results to stakeholders, developed white papers, and met with customers to assess product requirements
- Awards: Engineering Excellence, 2023

Lockheed Martin **Systems Engineer**

Rotary & Mission Systems
2019 – 2021

- Developed models and simulations to optimize RF product performance using model-based systems engineering and statistical methods
- Performed product lifecycle and root-cause analysis to assess product limitations
- Presented results to stakeholders, developed white papers, and met with customers to assess product performance

Harvard University **Research Fellow**

Division of Applied Physics, School of Engineering & Applied Science
2017 – 2018

- Led the development of model-based methods for optimal control of patented feedback control systems, e.g., CFD, electro-hydrodynamics [1]
- Presented findings to faculty/researchers and published original research in peer reviewed journals [2]

Cornell University **Researcher**

Dept. of Fiber Science, Nano-Manufacturing Laboratory
2013 – 2017

- *Patented new manufacturing processes [1] and developed instrumentation, simulations, and control systems for the Intel Strategic Research Alliances (ISRA) program [6]*
- *Designed integrated systems for thermal analysis and nano-manufacturing methods [3], e.g., PID/high-voltage*
- Presented findings at technical conferences, and published results in peer reviewed journals [2]

California Institute of Technology **Research Technician**

Dept. of Applied Physics & Materials Science, Space Radiation Laboratory
2009 – 2011

- *Developed software to process and analyze data from satellite images*
- *Developed and tested high-voltage hardware for research in x-ray optics and plasma physics*

Lawrence Berkeley National Laboratory **Research Assistant**

The Advanced Light Source, X-Ray Optics Laboratory
2008

- Developed calibration methods for the modulation transfer function of surface profilometers using optical metrology
- Presented findings to faculty/researchers and published original research in peer reviewed journals [4][5]

EDUCATION

University of Washington
University of Washington
Cornell University
Rensselaer Polytechnic Institute

Mechanical Engineering
Entrepreneurship
Applied Physics
Physics

Ph.D. (In Progress)
Certificate (In Progress)
M.Eng.
B.S.

IP & PUBLICATIONS

1. **Methods and Systems for Electrospinning**, PCT/US2018/042354, January, 2019.
2. **[Editor's Pick] Journal of Applied Physics**, Volume 125, Issue 5, Controlled Deposition of Electrospun Nanofibers by Electrohydrodynamic Deflection, February, 2019.
3. **Springer, Advances in Intelligent Systems and Computing**, Development of an Automated Pressure Sensitive Thermesthesiometer..., 2018.
4. **SPIE Volume 7448, Advances in XRay/EUV Optics and Components**, IV, ISBN: 9780819477385, Binary Pseudo-random Gratings and Arrays for Calibration of Modulation Transfer Function of Surface Profilometers: Recent Developments, 2009.
5. **Journal of Vacuum Science and Technology, Microelectronics and Nanometer Sci. B**, Volume 27, Issue 6, pp. 3213-3219, Development of Pseudo-random Binary Arrays for Calibration of Surface Profile Metrology Tools, 2009.

COMPUTATION

Git, Python, C, C++, MATLAB, Linux, LabVIEW, COMSOL, ANSYS, Arduino, CAD, LaTeX, JIRA, Confluence, DOORS