P.O. Box 88011
Seattle, WA 98138

Paul Soldate

oldbrickbuilding.github.io

pcs23@uw.edu
(707) 478-5950

EXPERIENCE

University of Washington — ***Dept. of Mechanical Engineering***
Doctoral Student — ***In Progress***

- Pursuing doctoral studies in precision instrumentation and model-based methods for control

Boeing — **Boeing Defense, Space, & Security**
Systems Engineer — ***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 — ***Rotary & Mission Systems***
Systems Engineer — ***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 — ***Division of Applied Physics, School of Engineering & Applied Science***
Research Fellow — ***2017 – 2018***

- Developed electrohydrodynamic models for optimal control of patented nano-manufacturing processes [1]
- Presented findings to faculty/researchers and published original research in peer reviewed journals [2]

Cornell University — ***Dept. of Fiber Science, Nano-Manufacturing Laboratory***
Researcher — ***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*
- *P*resented findings at technical conferences, and published results in peer reviewed journals [2]

California Institute of Technology — ***Dept. of Applied Physics & Materials Science, Space Radiation Laboratory***
Research Technician — ***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 — ***The Advanced Light Source, X-Ray Optics Laboratory***
Research Assistant — ***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	*Mechanical Engineering*	*Ph.D. (In Progress)*
University of Washington	*Entrepreneurship*	*Certificate (In Progress)*
Cornell University	*Applied Physics*	*M.Eng.*
Rensselaer Polytechnic Institute	*Physics*	*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 Elecrohydrodynamic 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