

# Neal Dawson-Elli

## Chemical Engineer - Data Scientist

### Address

546 NE Ravenna Blvd  
Apt 303  
Seattle, WA 98115

### Telephone

1 (607) 857-9791

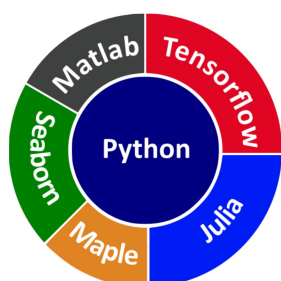
### Mail

nealde@uw.edu

### Web & Git

nealde.github.io  
github.com/nealde

### Programming



### OS Preference

GNU/Linux ★★★★★  
Unix ★★★★★  
MacOS ★★★★★  
Windows ★★★★★

### Availability

Summer 2018

### Interest

Data Analysis  
Modeling  
Machine Learning  
Software Carpentry

## Experience

08/17 - 09/17 **Software Engineer**

Faraday Technologies, Dayton, OH

Design and development of software for data analysis for electropolishing of metal surfaces. Implementation of neural networks for process selection.

01/14 - 06/15 **Technician**

OLEDWorks, Rochester, NY

Development of software for improved data management in Excel VBA, operation of a chemical vapor deposition chamber for OLED device creation.

03/13 - 08/13 **Technician**

Empire Precision Plastics, Rochester, NY

Database overhaul in Filemaker, creation of searchable databases in Excel, management of injection molding and ultrasonic welding processes.

05/12 - 08/12 **Technical Intern**

Corning Incorporated, Corning, NY

Independent research on the creation of coatable separators for ultracapacitors, focus on scaling up and improving current processes.

05/11 - 08/11 **Technical Intern**

Corning Incorporated, Corning, NY

Focus on scaling up of ultracapacitor material fabrication and reduction of hazardous waste.

## Education

2015 - 2020 **Ph.D in Chemical Engineering (Expected)**

University of Washington

with Option in Advanced Data Science and Option in Data Science  
Research:

*Improving the performance of physics-based li-ion battery models using data science techniques*

*Principle Investigator: Prof. Venkat R. Subramanian.*

*GPA: 3.59/4.0*

2010 - 2015 **B.S. in Chemical Engineering**

Rochester Institute of Technology

Main subjects:

*Fluid Mechanics, Thermodynamics, Reaction Engineering, System Dynamics and Control, Material Science*

*GPA: 3.58/4.0*

## Publications

N. Dawson-Elli, S.B. Lee, M. Pathak, K. Mitra, V.R. Subramanian

**Data Science Approaches for Electrochemical Engineers: An Introduction through Surrogate Model Development for Lithium-Ion Batteries**

*Journal of the Electrochemical Society - Pending*

January 3rd, 2018

Neal Dawson-Elli