Devon Walker

devonw@andrew.cmu.edu \diamond 717-304-2186 \diamond Pittsburgh, PA devonwa.com \diamond linkedin.com/in/devonwalker

Education Carnegie Mellon University

December 2016

M.S. in Chemical Engineering (GPA: 4.0/4.0)

University of Pittsburgh

April 2012

B.S. in Chemical Engineering (GPA: 3.3/4.0)

♦ Minor in Computer Science

Research Carnegie Mellon University

Pittsburgh, PA

Master's Thesis, Advisor: Prof. John Kitchin

January 2015 – Present

Working Title: A neural network empirical potential for graphene defect structures.

- ♦ Performed *ab initio* calculations using DFT with VASP on algorithmically generated graphene defect structures.
- Developed neural networks to use as potentials in MD simulations with the accuracy of DFT and computational cost similar to empirical potentials.

Industry EZSoft, Inc

Malvern, PA

Automation Engineer

October 2012 – July 2015

- Deployed to provide on-site support for the research and development group within a major pharmaceutical company.
 - · Managed three projects for integrating new technologies into a prototype process.
 - · Recorded experiment data into a SQL database and used statistical analysis to develop further experiments and deliver presentations to superiors for project funding.
- ♦ Developed the operator interface for a bakery with over twelve hundred I/O points spanning three synchronous Allen-Bradley PLCs.

US Liner Company

Cranberry Twp, PA

Research Engineer Internship

January 2012 – May 2012

♦ Furthered product development by testing polymer materials using ASTM standards.

Chemical Engr. Dept., University of Pittsburgh

Pittsburgh, PA

Process Control Engineer Internship

May 2011 – December 2011

♦ Developed the LabView control systems for seven laboratory experiments used by all students taking the senior chemical engineering lab.

Certificates

Fundamentals of Engineering Exam (EIT)

April 2012

Skills

Applications: SciPy, LAMMPS, VASP, Aspen Plus, Microsoft Office, Linux, Virtual Machines, Ethernet Networking, RSLogix, FactoryTalk View

Programming languages: Python, Matlab, Simulink, LabView, SQL, C#, VBA, Java, PLC Ladder Logic, HTML, CSS, LATEX

Affiliations

American Institute of Chemical Engineers Order of the Engineer Member, 2010 – Present

Member, 2012 - Present