

EDUCATION

- **University of Wisconsin Madison** Madison, WI
B.S. Computer Science, Minor Math; GPA: 3.75/4.00 Sep. 2014 – May. 2019

EXPERIENCE

- **S&C Electric** Chicago, IL
DevOps Engineer Intern May 2018 - Aug 2018
 - **Continuous Integration:** Created jenkins pipeline to hook with git commits, build and test on on-prem agents, then push results to email and reporting platform
 - **Test Automation:** Programmed restful python wrapper libraries over internal testing tools and packaged with pip and deployed using jenkins
 - **System Administration:** Setup and configured new testing machines. Troubleshooted Linux build errors, hardware failures, and network configuration problems across devices
- **S&C Electric** Chicago, IL
Data Analyst Intern Sep 2017 - Dec 2017
 - **Machine Learning:** Created machine learning models with python pandas and sklearn to predict downtime and failure causing events on injection molding machines
 - **Analytics:** Programmed vba front-end and SQL queries for department's reporting and analytics
- **Domtar** Nekoosa, WI
Software Developer Intern Jan 2017 - Aug 2017
 - **Scripting:** Reprogrammed unoptimal vb.net controls and added trend visualization scripts
 - **Development:** Automated tracking of grade change data with C# application to pull, clean, and display data to management.
 - **Development:** Created C# application to set machine tolerance limits and display alarms and data logs to operators on machine failures.
- **Blood Research Institute** Milwaukee, WI
Computer Vision Intern May 2015 - Aug 2015
 - **Image Recognition:** Designed computer vision pipeline to filter, cluster and count cells on histology images.

SELECTED PROJECTS

- **Momentum Investing Visualization:** Python visualization shows time span one on x axis and time span two on y axis for any company and time span to illustrate that momentum investing or its inverse fails
- **ETF Tax Loss Harvester:** Design algorithm using Python API to sell ETF's for tax loss then buy equivalent ETF to harvest tax losses automatically and avoid the wash rule
- **AutoGui:** Open source python and C# library for simple Windows GUI automation/testing using element properties.
- **RecorderSpy:** Windows automation element spy tool shows GUI element properties for use with AutoGui.
- **CI/CD Pipeline:** Jenkins pipeline provisions VM's on AWS with terraform, configures with Ansible, and builds vagrant boxes with packer on any successful commit.
- **Semi-Conductor Predictor:** Kaggle project uses machine learning to determine best predictors for conductivity
- **ChinesePod Webscraper:** Scrapes lesson materials of leading chinese instruction site
- **Carrot Compiler:** Course project of a full compiler including scanner, parser, type/name checker, and code generator.

PROGRAMMING SKILLS

- **Languages:** Python, Java, C, SQL, C# **Technologies:** Git, Jenkins, Linux, Terraform, Ansible, Selenium