Landon Wright

Email : Landon.Wright91@gmail.com

Education

- **Brigham Young University** — Provo, UT
  Master of Science in Mechanical Engineering — *Sept. 2017 – Aub. 2019*
- **Brigham Young University** — Provo, UT
  Bachelor of Science in Mechanical Egnineering — *Jan. 2013 – Apr. 2017*

Experience

- **Kaiser Aluminum** — Spokane Valley, WA
  Research and Development Process Engineer — *Dec 2019 - Present*
  - **Data Mining and Engineering**: Revised recovery calculations and unified production and financial data to identify, present, correct, and log changes to underperforming products leading to >$1.2 million in increased revenue and a 43% reduction in latest order delinquency.
  - **Hotline Execution Library**: Developed modernized replacement for machine setup parameters, exposed calculations via rest api eleminating the need for redundant code libraries and expensive efforts to align calculations.
  - **Parts Form Calculator**: Translated planning calculations from Excel spreadsheets to a Python library. This allows for integration into higher tier planning systems to enable broad process optimization and trade-off analyses to be performed.
  - **First Pass Yield**: Implemented performance to plan data analysis system with operator feedback. This system Led to a 0.5 percentage point improvement in recovery.
- **U.S. Synthetic** — Orem, UT
  Research and Development Engineer — *Aug. 2019 - Dec. 2019*
  - **Data Analysis**: Used functional data analysis to evaluate the pressure accumulation profiles in high pressure/high temperature cells used in polycrystalline diamond production.
  - **Material Qaulification**: Implemented testing, analysism and certification process for qualification of novel carbide compositions.
- **Brigham Young Univeristy** — Provo, UT
  Research and Teaching Assistant — *Feb. 2014 - Aug. 2019*
  - **Research Assistant - Shared Autonomous Vehicles**: Developed discrete event simulations of shared autonomous vehicles in Julia. The software collected city information for OpenStreetMap, generated plausible user demand for the traffic network, and simulated the interplay between citizens and autonomous vehicles under varying relocation strategies.
  - **Research Manager - CAD Automation**: Managed Group of students in efforts to develop autmated methods of determining total reachable envelopes of kinematic assemblies in CAD software.
  - **Research Assistant - CAD Automation**: Worked to develop multi-user CAD software as an API plugin for Siemens NX. Allowed for multiple users to interact with the same model at one time.
  - **Teaching Assistant - Systems Engineering and CAD Applications**: The course covered the development of software for the integration of disparate programs using APIs to enable system level decision making.
- **Honeywell** — Phoenix, AZ
  Systems Egnineer Intern — *Summer 2018*
  - **Simulink Automation**: Implemented analysis library and configuration system for MatLab Simulink. This process led to an 88% reduction in analysis time and enabled monte-carlo analysis techniques previously thought to be prohbitively time consuming.
  - **Data Visualization**: Implemented novel visualization methods for understanding design feasibility using the increased volume of data enabled by automation of Simulink simulations.

Projects

- **Rescue Equipment Research**: Examined impacts of weather on degredation of webbing. Awarded best paper at the 2016 International Technical Rescue Symposium.
- **Kevin**: Flask based budget tracking and reciept entry website.
- **SegmentMapper**: Simple Flask based webapp integration with Strava API to collect segments from a users profile and map them. Different users are given different colors and each segment is colored based on the fasted user.