Landon Wright

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As a Mechanical Engineer with strong programming skills and a passion for data driven decision making, I excel in demystifying complex ideas and tackling tough challenges. I've consistently driven financial growth, generating an additional $300,000 in 2021 and $1.2 million in 2022.

Experience

- **Kaiser Aluminum** — Spokane Valley, WA
  Research and Development Process Engineer — *Dec 2019 - Present*
  - **Planned Recovery Improvement Lead**: Initiated lot level recovery calculations with unified production and financial data to identify, present, correct, and log changes to underperforming products. Collaborated with responsible parties to implement improvements leading to $1.2 million in increased revenue for 2022 and a 43% reduction in latest order delinquency with no capital investment.
  - **Software Development**: Developed a web-based calculator for machine setup parameters, harmonizing the setup and planning processes. This implementation eradicated errors from uncoordinated code changes, enhancing overall workflow consistency.
  - **Process Improvements**: Led a field-based error identification initiative, working with automation and production teams to rectify issues and improve communication. This proactive approach boosted annual revenue by $300,000 without additional capital investment.
- **U.S. Synthetic** — Orem, UT
  Research and Development Engineer — *Aug. 2019 - Dec. 2019*
  - **Design of Experiments**: Designed and carried out three factor DOE to analyze limiting factors for anvil failure in High Pressure High Temperature chemistry cells.
  - **Material Science**: Implemented testing, analysis and certification process for qualification of novel carbide compositions.
- **Brigham Young University** — 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 from 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 automated methods of determining total reachable envelopes of kinematic assemblies in CAD software.
  - **Research Assistant - CAD Automation**: Worked collaboratively 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. Implemented multi-user test plans to ensure system performance and accuracy.
- **Honeywell** — Phoenix, AZ
  Systems Engineer Intern — *Summer 2018*
  - **Simulink Automation**: Implemented an automated analysis library and configuration system for MATLAB Simulink. This process led to an 88% reduction in analysis time and enabled Monte Carlo simulation techniques previously thought to be prohibitively time consuming.
  - **Data Visualization**: Implemented novel visualization methods for understanding design feasibility using the increased volume of data enabled by automation of Simulink simulations.

Education

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

Projects

- **Rescue Equipment Research**: Examined impacts of weather on degradation of webbing. Awarded best paper at the 2016 International Technical Rescue Symposium. Led to initialization of student led research group.
- **Kevin**: Flask based budget tracking and receipt entry website. Actively used from 2020 to current.
- **SegmentMapper**: Simple Flask based integration with the Strava API to collect segments from a user's profile and map them. Different users are assigned different colors and each segment is colored based on the fastest user.