LUCAS SEE, M.S.
Phone: 509-637-6842 **Email:** seelcs12@gmail.com **Github:** https://github.com/pinstripezebra

SKILLS:

Coding: Python(Pandas, Numpy, Scikit-Learn, Tensorflow, Dash), SQL, R, Pyspark

Technical: Machine Learning(Classification, Regression, Time Series Analysis, Deep Learning), Data Analysis, Data Mining, Data Visualization

Tooling: Power BI, DAX, Excel, Git, Docker, Kubeflow, Azure ML Studio

Non Technical: Project Management, Presentation, Communication

Experience:

Strategic/Development Industrial engineer, Intel Corporation

May 2022 - Present

- Led development of IMPACT Runrate Dashboard resulting in VF wide standardization of tool Runrate calculations, advanced analytic capabilities, and over $16M capital savings
- Developed and deployed unsupervised clustering system for providing recommended settings for capacity forecasting system resulted in 4% increase in forecast accuracy
- Developed Supervised Machine Learning (Random Forest regressor) to perform inference on wet etch tool performance, driving $4M tool savings through more efficient cascading
- Built and standardized factory wide EFL/RW BI report, comparing actual performance with MOR. Report reviewed with > 100 managers quarterly and used to drive MOR adjustments on >20 CEID's to mitigate ramp risk
- Designed high dimension anomaly detection app for Factory Outlier Detection using Pandas, Sklearn, and Dash

LTD Industrial Engineer, Intel Corporation

July 2019 – April 2022

- Developed analytic model for Test Wafer Forecasting using SQL and Power BI. Used system to identify area's of focus for TW taskforce resulting in 5% reduction in Test Wafers usage and $6M cost savings
- Developed capacity models to define tool performance and forecast tooling requirements for over $500 Million in capital, continuously ensuring that the engineering module was capable of supporting factory commits
- Produced Power BI-based capacity forecasting model combining FCS + Tool Install data to highlight top priority tools and support critical installs for ~$500M construction program
- Implemented CPLEX-based optimization model to identify optimal chamber configurations on Dielectrics tools, saving $4.5M through more efficient chamber combinations

Manufacturing Engineer, Genie Corp.

June 2017 – June 2019

- Led development and implementation of industrial control system, reducing core quality defect by 80%
- Developed Data Analysis tools to track production issues and drive resolutions, reducing reoccurrence by 15%

Education:

Masters of Science (M.S.) In Data Science, October 2019 – May 2023
University of Wisconsin-GB

Bachelor of Science (B.S.) in Industrial and Systems Engineering, September 2013 – June 2017
University of Washington, Seattle

Projects

Master's Thesis: Machine Learning for Airline Delay Prediction; Investigated causes of commercial airline delays and trained a deep neural network capable of predicting future delays with 91% accuracy

CNN for Google Maps Graffiti Identification: Trained convolutional neural network on Google Streetview data and created application comparing frequency for 20k images across 50 largest U.S. cities