505-697-8479 | 19heyinglog@gmail.com | LinkedIn | GitHub

## **EDUCATION**

Iowa State University

Ames, Iowa

August 2019 - December 2023

Bachelor of Science in Aerospace Engineering

GPA: 3.48/4.00

Dean's List: Spring 2021, Fall 2022, Spring 2023, Fall 2023 University Of New Mexico

Master of Science in Electrical Engineering (Emphasis: Systems and Contorls)

Albuquerque, New Mexico August 2025 - (Expected) May 2027

# EXPERIENCE

**Intel Corporation** 

Rio Rancho, New Mexico

January 2024 - Present

Tactical Systems Engineer

Complete cycle time goaling analyses for all products manufactured in New Mexico

Develop and maintain site specific reports and analyses

Design of automated buisness process for 1-click assessment ready for review with factory management

Design and development of Capacity-Velocity model (based on G/G/m Equation) capable of providing accurate end of line takt time of any product

Design and development of tactical horizon discrete event simulation capable of predicting cycle time limiters based on current factory performance compared to capacity model theoretical output

Maintain factory reporting system supporting backend through service requests

Design and distribute company-wide analyses and models for factory cycle time

ETL applications to support factory indicators of machines not connected to traditional IBM DB2 database structure Factory segment chart used to track wafers across all sites within Intel for central planning

Wet Etch Capacity Engineer

November 2021 - January 2024

Capacity analysis of all Wet Etch machines for Fab F11X

Maintain a model of record for all tools associated with Wet Etch module

Statistical analysis of real-time data versus modeled metrics

Velocity model based on cost-optimized capacity model based on plan wafer starts

Develop various tools for Capacity Engineering team and Production Engineering organization

Python application used to calculate wafer batch size and throughput of diffusion furnace toolsets, used to reduce analysis time

Python application that calculates the capacity of tank-based Wet Etch tools constrained to the limiting tank, greatly reduced analysis time

Development of 3-inch wafer capacity model to replace in-person time study, reduced assessment time from 1 quarter to 1 week by using historical data

#### Projects

#### Project Manager

January 2023 - December 2023

Ames, Iowa

Iowa State University Senior Capstone

Organize team meetings and drove productive weekly instructor meetings

Create standard template for all reports (LaTeX) and ensured all data reported is accurate and up-to-date

Optimize aircraft aerodynamic parameters using STAR CCM+

Designed and optimized CAD models and manufacturing process

Design and layup of rib and spar composite wing using carbon fiber skin and balsa ribs

# Payload Engineer

January 2021 - May 2021

Ames, Iowa

Cylaunch Rocket Design - Iowa State University

Design payload container and manufacture payload device

Develop inertial navigation algorithm to locate craft after landing

Support development of altitude management system

## TECHNICAL SKILLS

Languages: Python, C#, Java, C/C++, VBA, Arduino, MATLAB, SQL Server

Frameworks: NET, JUnit, NUnit, OpenGL

Development Tools: Git, VS 2022, VS Code 2022, Jetbrains Suite, Eclipse

Sofware: MS Office Suite, Adobe Creative Suite, Solidworks, STAR CCM+, Blender Libraries: Python - numpy, pandas, matplotlib, scipy | C# - WinForms, EventFlow