

RYAN DALBY

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Salt Lake City, UT

EDUCATION

The University of Utah

May 2022

M.S. in Mechanical Engineering- Robotics

B.S. in Mechanical Engineering

Minor in Computer Science

Overall GPA: 3.897

EXPERIENCE

Seagate Technology

May 2021 - August 2021

Robotics Software Engineer Intern

Longmont, Colorado

- Implemented new C#/.NET software compatibility for a legacy tool by documenting and porting tool IO, implementing SCARA robot kinematics, and creating software to convert learned robot positions to be compatible with the new software. Extensively documented porting process, tested software on hardware, and described a plan for replacing legacy software with new software.
- Supported software of a tool throughout the summer. Completed high priority backlog items, tested on hardware, and released software to production, communicating with teams around the world.
- Investigated creating Cognex Vidi models for defect detection and OCR. Labeled data to train software and documented how to develop models.

Seagate Technology

May 2020 - December 2020

Robotics Software Engineer Intern

Longmont, Colorado

- Leveraged machine learning to predict tool failures using regression, support vector machines, and recurrent convolutional neural networks implemented using Python and Keras.
- Constructed a data wrangling pipeline to extract trainable features from raw log data.
- Created ML.NET machine learning ONNX model consumption platform.
- Expanded team's machine learning knowledge. Integrated machine software with a machine learning data platform using C# and .NET.
- Reliably communicated with remote team members around the world.

Code Corporation

May 2019 - August 2019

Mechanical Engineer Intern

Draper, UT

- Utilized the iterative engineering design process through SOLIDWORKS and rapid prototyping to develop an injection-molded bracket to combine multiple parts into a single new product.
- Effectively made various changes to existing products through an engineering change order process to reduce manufacturing costs. Assisted in conducting product testing to determine possible improvements.
- Employed agile project management in a professional work environment to increase productivity and communication.

The University of Utah- Dr.Meredith Metzger

April 2018–December 2018

Glide Maneuver Experiments of a Small Delta-Wing UAV

Salt Lake City, UT

- Attained UROP funding to research and develop a UAV for glide maneuver experiments.
- Integrated an IMU, altimeter, and pressure transducer by means of sensor fusion to control eleven surface servo motors. Developed on an Arduino using I2C to interface with sensors.

RELEVANT COURSEWORK

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| Graduate Coursework | Deep Learning, Machine Learning, Image Processing, Virtual Reality, Classical Control Systems, Robotics, Introduction to Robot Control |
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TECHNICAL STRENGTHS

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| Programming Languages | C#, Python, C++/C, MATLAB, Java, JavaScript |
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| APIs & Tools | .NET, Git, Numpy/Pandas/Matplotlib, PyTorch, Sci-kit Learn, Sci-kit Image, Jupyter, Unix (Bash), Windows, Vim, VScode, Visual Studio, SOLIDWORKS (CSWA certified), Jira (Scrum), LaTeX, Arduino, ROS, Three.js |
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