

**Matthew E. Prinz** | matt.prinz@gmail.com | 512-412-5494 | [linkedin.com/in/matthewprinz](https://www.linkedin.com/in/matthewprinz)

## EDUCATION

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### Bachelor of Science, Electrical and Computer Engineering

The University of Texas at Austin

May 2021

Overall GPA: 3.53/4.00

## RELEVANT COURSEWORK

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Operating Systems, Software Design & Implementation II, Algorithms, Concurrent and Distributed Systems, Computer Architecture, Data Science Lab, Data Science Principles, Real-Time Digital Signal Processing Lab,

## EXPERIENCE

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### Software Engineering Co-op, L3Harris Technologies

#### Sensor Software Team

1/20-6/20

- Implemented key feature of dwelling by enabling users to prioritize certain scans over others, with four different priority modes
- Designed and improved the flow of calibration data through the system by removing multithreaded access with no loss in performance
- Developed error response when given a scan command with an invalid configuration as well as blocked use of the test signal generator under certain scan configurations

#### CICS (Common Intelligence Collection Systems) Group

6/20-8/20

- Finished implementing messaging service by doubling the amount of information available to the user

### Project Leader, Rig Automation Performance Improvement in Drilling (RAPID)

1/19-5/19

- Identified ten phases in drilling process which could potentially save up to \$6 million for Oxy
- Contributed to a paper that was presented at the SPE-IADC Drilling Conference 2020

### Data Analysis Intern, RAPID

#### Clustering of Time Series Data

10/18-11/18

- Plotted DTW path between time, bit depth, differential pressure, bit torque, and bit RPM with focus on the minimum for use in unsupervised learning
- Found minimum distance using FastDTW, pandas, and NumPy to determine time series similarity for use in clustering

#### Analysis of UCS Data

12/18-1/19

- Built random forest classifier using NumPy, pandas, and scikit-learn to predict drilling efficiency as measured by UCS – closely related to MSE

## CLEARANCES

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Secret, COMSEC

June 2020-2025

## PROJECTS

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### Instagram Scraper, Personal Project

7/20-Present

- Downloaded thousands of posts and stories of users for use in image recognition and classification using Requests and the Python standard library

### Multi-Threaded Chat Room, Software Design and Implementation II

8/19

- Built from scratch chatroom using JavaFX, Sockets, multithreading, and observer design pattern

## SKILLS

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**Proficient:** Python, Java **Familiar:** C/C++, ARM Assembly, MATLAB, Bash, Git, LabVIEW, Agile Development

## ACTIVITIES

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Eagle Scout: Organized book drive which generated 500 books for Overton Elementary