# TRISTAN PARTIN

### Staff Software Engineer @ Micron Technology

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# **EXPERIENCE**

### Staff Software Engineer

#### Micron Technology

August 2020 - Present

Austin, Texas

- Worked on the Heterogeneous-Memory Storage Engine (HSE) in an effort to make it one of the fastest performing storage engines on the market
- Integrated HSE with various open source storage technologies like MongoDB, MariaDB, and Ceph
- Designed language bindings to interact with HSE

## Software Developer

#### **Expero**

Harabar July 2019 - August 2020

Austin, Texas

- Assisted in abstracting a collection of Java/TypeScript/Node.js microservices to be able to use both DataStax Enterprise and open source equivalents like Janus Graph, Cassandra, and Elasticsearch
- Developed a graph database benchmarking suite using Gatling, CosmosDB, TigerGraph, DataStax Enterprise, and Neo4j
- Migrated data from a legacy FileMaker system to AWS RDS

### Software Development Intern

#### Expero

May 2019 - May 2019

**♀** College Station, Texas

- Built out a graph database modeling course curriculum
- Developed a daily time reporting tool for company leads to track developer time charges using AWS Lambda and Go
- Created a microservice using AWS S3 and Java that performs dynamic PDF generation
- Built a proof of concept ASP.NET Core application using Microsoft's CosmosDB Gremlin API

### Software Engineering Intern

#### **National Instruments**

May 2018 - August 2018

Austin, Texas

- Worked as a driver developer on the XNET team, which develops solutions for automotive testing
- Implemented time synchronization between data acquisition modules in order to better correlate collected data using C++ in both the Windows kernel and userspace drivers

#### Software Engineering Intern

#### **Booz Allen Hamilton**

May 2017 - August 2017

♥ Houston, Texas

- Worked under the NASA Mission and Program Integration contract
- Translated a SharePoint table of all payloads/systems, hardware configurations, protrusions and overlaps aboard the International Space Station to MariaDB and SQL
- Developed a desktop application in Python for managing the aforementioned information

# **EDUCATION**

**Bachelor of Science Computer Engineering** 

Texas A&M University, College Station

May 2019

# **SKILLS**



# **PROJECTS**

Heterogeneous-Memory Storage Engine

#### GitHub://hse-project/hse

• A fast embeddable key-value store designed for SSDs and persistent memory, optimizing performance and endurance by orchestrating data placement across DRAM and multiple classes of solid-state storage

**HSE Python Bindings** 

### GitHub://hse-project/hse-python

 Python language bindings for the HSE C API

**HSE Java Bindings** 

#### GitHub://hse-project/hse-java

Java language bindings for the HSE C API

Various Open Source Contributions

# GitHub, GNOME

• My open-source contributions include organizations and technologies like Meson, GNOME, Electron, Terraform, etc.

# AWARDS/CERTS



Apache Cassandra<sup>TM</sup> 3.x Developer Associate

DataStax - 2020



**Eagle Scout Award** 

Boy Scouts of America - 2014