

# Daniel Moore

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## EDUCATION:

The University of Texas at Austin, B.S. Computer Science

May 2019

Future Coursework Computer Security, Software Engineering, Ethical Hacking  
Recent Coursework Algorithms and Complexity, Data Structures, Artificial Intelligence, Cloud Computing, Object Oriented Programming, Computer Architecture, Operating Systems, Intro to Data Mining, Neural Networks

## EXPERIENCE

### UT Austin Systems and Storage lab

May 2018 - Present

Undergraduate Researcher - **Rust, C, FUSE**

- Building a new user-space file system for NVMe SSDs, taking advantage of the concurrency and memory safety that Rust offers
  - Generated Rust bindings to a C library called SPDK used to interact with the NVMe protocol
- Building a rich API wrapper in Rust that makes use of these libraries
- Optimizing a file system using the popular user-space file system framework FUSE
- Learning in a fast paced environment to eventually publish a paper in March of 2019

Undergraduate Researcher - **Go, Kubernetes, AWS, GCP, RESTful API**

- Coded an aggregated api server in Go to extend the Kubernetes API in order to find the provenance of custom resources
  - Exposure to cloud computing tools like Kubernetes, GCP, and AWS
- Created a RESTful API server with query operators to audit resources on a Kubernetes Cluster
- Researched and gained a deep understanding of Kubernetes and related projects like Grafeas, Helm and Kritis
- Wrote Unit Tests to ensure methods worked properly during development

### PricewaterhouseCoopers

May 2018

Software Engineering Intern - **C#, ASP.NET, Javascript, MySQL, JQuery, JSON**

- Implemented using an MVC (model-view-controller) paradigm
  - Used Javascript, JQuery, and React to build a responsive UI
- Deployed the application in production and it is used by the DevOps team to migrate and balance the database load on the servers PwC uses at Rackspace

### Tekvizion Labs

May 2016

Full Stack Development Intern - **Java, PostgreSQL, Spring, Javascript, Angular, JSON**

- Coded three end-to-end web applications without prior knowledge of the framework, networking or web development
  - Made and optimized a web application to poll the network connectivity of devices on the company network
  - Contributed a web application to manage the network access list for customers
  - Set up a wiki used by the development team for documentation and tutorials
  - Built a standalone web application for the CEO to manage Non Disclosure Agreements
- Taught three new graduate hires the web development knowledge I had accumulated

### UT Dallas Mechanical Engineering Lab

May 2014

Research Intern - **SolidWorks**

- Selected for the Nanoexplorers program during high school, and joined the robotics team
- Used a 3D-CAD software called SolidWorks to model and 3D-print limbs, parts and touch sensors for a rehabilitation robot.

## PROJECTS AND TECHNICAL SKILLS

### Projects

- Wrote a book recommender based on Kaggle's book dataset with six million ratings
- Used the Twitter api to create a bot that managed my personal Twitter
- Cloud Computing coursework using Flask, AWS EC2, Beanstalk, S3 and Amazon's NoSQL database DynamoDB
- Developed a 2D platformer with 16 levels, where I implemented the physics engine to recreate Super Meat Boy in pure Java
- Paperless - HackTX 2018 project where students sign up, receive a QR code, paste it onto their resume for career fairs.
  - Companies scan and then the QR code links the profile/resume of each student so that they can share and annotate it
  - Built with Django and React, is hosting on the cloud and uses cloud storage!
  - Exposure to Android mobile development

### Languages

- Proficient in Go, Python, Java, C++, HTML, CSS
- Familiar with Javascript, Swift, Clojure, Rust, C

### Methodologies

- Object Oriented Design, REST, Unit Testing, Functional Programming, NoSQL, Relational Databases, Unit Testing, Continuous Integration, Pub/Sub, Concurrency, Containers, Virtualization, PaaS, Backend, Software Engineering

### Software

- Docker, AWS, Kubernetes, Git, Spring, ASP.NET, Linux, DynamoDB, PyTorch, React, Django, Travis CI