# **Dylan Harden**

512-831-9441 | dylanharden33@gmail.com | LinkedIn | GitHub | Website | U.S. Citizen

#### **EDUCATION**

Texas A&M University - College Station, TX

Aug. 2023 - May 2025

**Master of Computer Science**, GPA: 3.75

Coursework: Machine Learning, Deep Learning, Deep RL, LLMs, Trustworthy NLP, AI Robotics, Computer Vision

Texas A&M University - College Station, TX

Aug. 2019 - May 2023

Bachelor of Science in Computer Science, Minor in Math, Cum Laude

Coursework: Senior Capstone Design, Software Engineering, Computer Graphics, Computer & Network Security

#### **WORK EXPERIENCE**

Samsung - Austin, TX

May 2024 - Aug. 2024

Software Engineer Intern

- Created a company knowledge base chatbot using Python and Llama 3 with Retrieval-Augmented Generation (RAG) on 100,000+ Jira/Confluence pages, enabling users to utilize GenAl with up to date proprietary information
- Implemented authentication with Okta and session storage in MongoDB, ensuring end-to-end privacy for highly confidential R&D data while enabling seamless retrieval of 3000+ conversations per month
- Facilitated rollout to 500 employees by writing Infrastructure as Code (IaC) to deploy 5 systemd services on 2 A100 servers and leveraged NGINX for Load Balancing and High Availability

## Resideo (Honeywell) - Austin, TX

May 2023 - July 2023

**Cloud Software Engineer Intern** 

- Implemented a workflow observability solution for doorbell camera registrations using the ElasticSearch .NET
   SDK, eliminating unnecessary debugging meetings and saving engineering hours for 6 other developers
- Executed a list of 10+ tickets for bug fixes and enhancements in an internal React app to provide over 8
  dependent teams with streamlined backend system interactions for IoT device management

#### Charles Schwab - Austin, TX

June 2022 – Aug. 2022

Software Engineer Intern

- Developed tailored features for 3 user groups in a client-facing web-app with Angular and .NET, transitioning a by-mail voting process to digital for over 10,000 advisors on Schwab Advisor Services platform
- Directed a cross-functional team during a company wide Business Summit Challenge, presenting an innovative product idea to leadership and earning 1st place among all intern groups

#### **TECHNICAL LEADERSHIP**

Team Lead - Autonomous Vehicle Navigation Capstone | Python, Flask, PostgreSQL, Docker

- Led a SR capstone team as part of an autonomous vehicle challenge, winning 1st place out of 10 universities
- Used Dijkstra's shortest path algorithm to enable pathfinding between any 2 points on the competition course
- Rectified inaccuracies in an existing Postgres DB with extensive Python data cleaning scripts and SQL queries

Product Owner - TAMU Horticulture Club Website | React, Ruby on Rails, Docker, AWS

- Directed an agile team to develop a web app to streamline Horticulture Club attendance and event tracking
- Implemented dockerfiles to enable isolated environments for consistent deployment across team machines
- Created an event calendar with React, allowing officers to easily add and update events on the Club's website

### **PROJECTS**

Llama3.2.c | C, Python

- Updated an open-source inference engine for Llama 2 to support newer Llama 3.2 family models
- Upgraded to Llama 3 tokenizer by adding regex splits and special token matching for chat formatting in raw C

**PyDetectGPT** | Python, PyTorch/HuggingFace

- Published an AI generated text detection package to PyPi achieving over 3000 downloads within 2 weeks
- Added a high level detection API and CLI by using probability curvature analysis and Fast-DetectGPT

#### **SKILLS**

Languages: Python, JavaScript, TypeScript, C/C++, SQL (Postgres), Java, C#, HTML/CSS

Frameworks & Libraries: React, .NET, Angular, Flask, NodeJS, PyTorch, TensorFlow, Ruby on Rails, Scikit-learn, LangChain

Technologies: Git, Docker, Kubernetes, ElasticSearch, GitHub, AWS, GCP, Azure, MongoDB, Figma, Nginx, REST