### Ethan Williams

ethan555.github.io ethan555williams@gmail.com in linkedin/ethanwilliams555 github/ethan555

#### **WORK EXPERIENCE**

**Trend Micro** – Senior Software Engineer, Austin, TX

February 2021 - Present

- Kubernetes Compliance Scanning Golang, Serverless, AWS, Kubernetes, Helm
- Led project to scan Kubernetes cluster configurations. Designed AWS backend architecture and coordinated project goals based on customer needs to ensure compliance standards.
- Built backend API and Docker image to trigger scans on user clusters, manage configuration and scan state, and store scan results, enabling customers to verify compliance standards on Kubernetes clusters.
- Cloud Container Security Golang, Serverless, AWS, Kubernetes, Helm
- Designed and implemented custom security rules feature to support customer-defined runtime security rules for Kubernetes clusters, alerting customers to custom security events.
- Built AWS backend scheduled inventory collection feature to collect and store customer resource data.
- Cloud Network Security Python, Serverless, Terraform, AWS
- Developed and improved RESTful API efficiency and reliability, according to usage telemetry.
- Designed and implemented AWS backend scheduled scan to retrieve metrics from customer cloud infrastructure to monitor health of customer resources, providing information for business priorities.
- Designed intern project and mentored two interns to implement RESTful APIs in AWS Lambda.
- Device Health Tool Node.js, SQL, React, Serverless, AWS
- Built React web app with AWS backend to analyze customer device health, empowering customer support to triage customer device issues with custom SQL-based health checks.

**Trend Micro** – Software Intern, Austin, TX

June 2020 - August 2020

• **Device Telemetry Parsing**: Built AWS Lambda API and workflow to parse unstructured customer appliance log and configuration data into JSON, aggregated in AWS Athena data lake.

**SnapStream** – Software Intern, Houston, TX

May 2019 - August 2019

• **Channel Filters**: Designed and created user UI filtering feature to create, edit, delete Channel Groups to manage customer recording channels in HTML, jQuery, .NET and SQL backend.

### **EDUCATION**

# The University of Texas at Austin, BS Computer Science

GPA 3.83, 2016 - 2020

## **PROJECTS**

# AI Hackathon Competition - Python, GPT-4

2024

• Designed and implemented GPT-4 based tool to update code files when given a list of breaking changes for dependencies. Led a team of 18 to integrate the tool with GitHub and CVE tracking.

## **Terrain A\* Pathfinding** – C#, Unity, Godot

2024

• Modified A\* algorithm for height difference-aware pathfinding on Simplex noise terrain.

## Don't Roast, 2D Game Dev Capstone – C#, Unity

2019

• Worked in team of 7 to develop 2D boss rush game.

**Audemos** – audemos.space – AWS (S3, Lambda), Serverless, JavaScript, HTML

2019

• Built audio sharing website with temporary file storage and audio playback.

#### **SKILLS**

Technologies: Kubernetes, Docker, Node.js, React, .NET, AWS, Serverless, Terraform, Helm, Linux, Git, Github Actions, Unity, Godot

Languages: Golang, Python, JavaScript, C#, Java, C++, C, SQL, Bash