

## Ethan Williams

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### WORK EXPERIENCE

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

February 2021 - Present

- **Kubernetes Compliance Scanning**

- Led project to scan Kubernetes cluster configurations. Designed 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 state, and store scan results.

- **Cloud Container Security**

- Designed and implemented custom security rules feature to support customer defined runtime security rules for Kubernetes clusters, forwarding security events to configurable SIEM solution.
- Built scheduled inventory collection feature to scan customer AWS ECS resource data.

- **Cloud Network Security**

- Designed and implemented scheduled scan to retrieve metrics from customer cloud infrastructure to monitor health of customer resources, stored in Redshift, aggregated in Grafana.
- Designed intern project and mentored two interns to implement Restful APIs in AWS Lambda, decreasing required number of API calls by 95%.

- **Health Analysis Tool:** Wrote React/AWS web application to analyze customer device health.

**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.

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### EDUCATION

**The University of Texas at Austin, BS Computer Science**

GPA 3.83, 2016 - 2020

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### 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.

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### SKILLS

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

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