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. Enabled customers to verify compliance standards on their Kubernetes clusters.
- **Cloud Container Security**
  - Designed and implemented custom security rules feature to support customer defined runtime security rules for Kubernetes clusters, alerting customers to custom security events.
  - Built scheduled inventory collection feature to collect 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, providing information for business priorities.
  - Designed intern project and mentored two interns to implement Restful APIs in AWS Lambda, decreasing required number of API calls by 95%.
- **Health Tool**: Wrote web app to analyze customer device health, empowering customer support.

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, Linux, Git, Github Actions, Unity, Godot

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