

SOFTWARE & REVERSE ENGINEER

■ jordangalerts@gmail.com | □ i7solar

Education

University of Central Florida

B.S. IN INFORMATION TECHNOLOGY

Orlando, Florida

July 2017 - May 2023

August 2023 - Current

Experience

Microsoft Remote

Software Engineer

· Azure Core Networking

- Rust, C#, C, DPDK, PowerShell
- Team: (August 2023 March 2024) OneDDoS Seamless Edge Hyperscale Infrastructure
- Leading a red-hat project: TCP/UDP/QUIC/DNS flood tool capable of sending 5mil packets/sec per core in Rust to verify sustainability of internal Azure services assiting developers and for teams to find vulnerabilities.
- Contributed to: Azure Front Door TCP/UDP/DNS mitigator in Rust capable of detecting abnormal traffic patterns automatically by utilizing red-hat project to find vulnerabilities from using burst/non-burst packets and multiple TCP flags.
- Reverse engineered and rewrote DPDK libraries to ensure proper compatibility for Azure machines utilizing only either a NVIDIA ConnectX-3/X-4/X-5 which assisted by Mellanox drivers allowed developers or teams run the flood tool at scale using up to 16 cores.
- Team: (March 2024 Present) SLB Software Load Balancer
- Leading project: Internal Code Generator using .NET Compiler Platform to create contract messages within .NET for Control Plane and C, Rust, Lua, Rust for Data Plane to aid networking application in bidirectional communication.

Microsoft Remote

SOFTWARE ENGINEER INTERN May 2022 - August 2022

- Azure Core Compute: Capacity Infrastructure Service and Scalability
- C#, TypeScript, JavaScript, HTML, CSS, Windows Batch
- Developed an internal Visual Studio Extension tool to assist over 200+ Azure CIS team user's development experience and diminish common JobType template build errors for build-out team.

Hayha Bots Remote

SOFTWARE ENGINEER

February 2022 - February 2024

- Go, Python, JavaScript
- HayhaAIO is a software that allows users to use a graphical user interface or a command line interface to automate the purchase of items sold on a third-party retailer's websites.
- Reverse engineered 20+ websites to create modules in Go that allowed over 3000 users within a year to make over 5 million dollars in profit such as: DickSportingGoods, Walmart, BestBuy, Shopify, AMD, and more.
- Reverse engineered bot protections such as Akamai Web 1.7X,2.X, CloudFlare Turnstile, PerimeterX 6.X.X,7.X.X, and DataDome to generate cookies or session tokens through request-based solutions ensuring modules can mock a real browser session to create a seamless checkout experience for the botter at scale.

Projects

Akamai Web Cookie Generator

OPEN SOURCED ON GITHUB

- Translated and reverse engineered core JavaScript script to Go.
- Wrote a client-side requested based app for 1.7X and 2.X.X that generated 10M cookies per month as a vendor through AWS.
- Simulated timings and mouse movements using perlin noise & farmed telemetry data.

CaseLink

OPEN SOURCED ON GITHUB

- Morgan & Morgan Hackathon Grand-prize Winner (\$12,000)
- Integrated Twilio for call transcription, database queries, and document retrieval to improve client experience.
- Implemented Whisper transcriptions with OpenAI, GPT summarizations, and DOCX parsing in JavaScript.

Skills

Programming Go, Rust, C#, TypeScript, JavaScript, Windows Batch, Powershell, Python, SQL, Java, C, Bash

Frameworks GoFiber, DPDK, Gin, Echo, Express.JS, React.JS, Hono, gRPC, WebSockets, RabbitMQ, Svelte

Git, Bitbucket, Visual Studio, CLion, GoLand, Visual Studio Code, Jenkins, Jira, Confluence, Workbench SQL, DataGrip,

Postman, PuTTY, Azure Dev Ops, Charles, Fiddler, Chrome DevTools, MITMProxy

Computer Networking, Data Structures, Reverse Engineering, Client Side Bot Protection, System Architecture, Scripting/Object-Orientated-Programming

Abstract

Tools