HENRY LUENGAS

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EDUCATION

California Polytechnic State University – San Luis Obispo	College of Engineering B.S. in Computer Science

SKILLS

Systems, Frameworks, Apps	Linux, Containers, Azure, Kubernetes, AKS, Terraform, Helm, Ansible, Chef, WSL, Tailscale, SQL, OAuth, OIDC, WebAuthn, Draw.io
Programming Languages	Bash, Python, Rust, Go, JavaScript, C, C++, Markdown, Julia, Elm, Java
Network Infrastructure	TCP/IP, VLAN, 5G Core & RAN, WiFi, SDN, Wireguard, Structured Cabling

EXPERIENCE

Senior Software Engineer – AT&T CIO Automation Platforms Development – Dallas, TX   Oct 2022 – Present
    Shared Platform Ops Team
- Deployed, maintained, and supported six shared platforms used by AT&T developers hosting service delivery and service assurance applications on premise and in Azure.
- Served as system administrator for 52 AKS clusters comprised of 1,500+ VMs with over 42,000 cores required for daily operation of 25+ internal development teams
- Designed and deployed Azure infrastructure to host the AT&T Software Symposium website using Terraform and Azure DevOps (ADO) pipelines for a structured IaC deployment
- Modernized Software Symposium website through redevelopment on a new tech stack and reimplementation using Azure Infrastructure as a Service (IaaS) resources
- Adapted site to cloud native design and created container based CI/CD GitHub Action workflows for the development team

Network Engineer – AT&T CIO Technology Development Program – Dallas, TX   Jan 2021 – Oct 2022
    Software Engineer – Wireless Technology, Network Analytics & Automation
- Containerized an app used for daily analysis of Passive Intermodulation (PIM) at network cell sites
- Deployed the app to a Kubernetes cluster on Azure using Terraform and Helm

    Specialized Networks Consultant – Consulting, Mobility & IoT Professional Services
- Developed, deployed, and presented 5G & IoT technical demonstrations highlighting video intelligence use cases for warehouse logistics to Private Cellular Network customers
- Implemented a containerized video transcoding app to stream 5G camera footage to internet video platforms using Docker and FFMPEG, as a technical demo for Private Cellular Networks
- Served as an administrator for the AT&T 5G Technical Associate Certification Course and as instructor for the section on container virtualization, CNFs, and VNFs

    Data Steward – Network Cloud, Blue Train Fabric Automation
- Automated cleaning and formatting process for physical and virtual network device setup data used by AT&T's internal cloud platform using Python and Microsoft Excel

PROJECTS

Tie-Dye Pixel Art Renderer
- Wrote a renderer in Python demonstrating various methods of process acceleration
- Implemented sequential and parallel running modes to assess performance of CPU parallelism
- Implemented a GPU compute mode with OpenCL showing process scaling to hundreds of workers
- Implemented an R* Tree spatial data structure to highlight speed increase from an optimized algorithm

Networked Chat App and Packet Analyzer
- Wrote client and server programs in C that use TCP to convey custom message packets between users
- Created a utility in C that uses NPCAP to inspect packets, functioning like a basic version of Wireshark