
Education

California State University, Dominguez Hills**Spring 2019**

B.S. in Computer Science

Coursework: Networking; Security; Algorithms; Data Structures; Databases; Operating Systems

Experience

Freelance Tech/IT Consulting**2010-2020**

Apply my creativity and experience to deliver solutions that solve problems, improve efficiency, and simplify technology advancement for clients. Computer support for hardware and software issues, as well as other devices. Planning, acquisition and implementation of functional in-home workspaces.

Projects

Secure Messaging Android App**Senior Project**

Encrypted messages embedded into image files enables private message sharing through memes:

- Uses RSA encryption algorithm and 2048-bit public/private key pairs
- Private key is managed at the system level and can't be exposed (Android KeyStore)
- Open source steganographic algorithm to embed the message into the image file
- Used SQLite database to store friendly public keys acquired from scanned QR codes
- Public keys are easily shared in person via QR-code or online via URL/URI

Homelab (Headless Ubuntu Server)

- PLEX Media Server (personal content streaming for myself and friends/family)
- Automated media download services with local web interfaces
- File/filesystem management scripts

Raspberry Pi 3 & Pi Zero

- Discrete personal OpenVPN server (secure entry point to administrate remotely)
- Ad filtering and traffic monitoring (local DNS service blocks ads for all LAN devices)
- Wireless print server (enabling a wired printer to be wireless)

'Intelligent' Robot Vehicle

Built a robot vehicle that would process input from hardware and make an "intelligent" decision. Written in C for the Lego Mindstorms framework, interfacing with hardware "eyes" and "ears," implementing Psychology concepts of human cognition and decision-making.

Tech & Skills

- **Languages** Java; Python; C++; C; SQL; Bash
- **Networking** Hands-On LAN administration: Routers; Repeaters; Modems; VPN Clients & Servers; Network Printers; Samba Shares; SSH Remote Access; Firewalls; Port Forwarding
- **Security** Asymmetric/Symmetric encryption; Cryptography; Network access control; Pen-testing
- **Operating Systems** Linux {Ubuntu, Ubuntu Server, Raspbian}; Windows {10, 7, XP}
- **Other** Virtual machines & Docker; Microsoft Office Word & Excel; Adobe Photoshop & Illustrator