Tres Sims

SUMMARY

Software and Hardware technology integration engineer with broad integration experience. Adept full-stack web developer using multiple industry standards including React JS, Python, Postgresql, and others. Passionate constructor of scalable solutions for account management, helpdesk support, VR/3D integration, additive production, and network administration. Accomplished custom mobile application developer in Java.

WORK EXPERIENCE

Digital Anatomy Simulations for Healthcare - *IT Specialist, Software Engineer*
February 2020 - March 2023

- Pioneered IT systems and software development for a cutting-edge technology startup resulting in $2.5M in revenue over three years.
- Led software development efforts for all projects, including documenting customer and stakeholder requirements, creating project schedules, and delivering on-time solutions.
    - Designed and wrote software for 3d printing quality control systems using Python and C++ reducing re-prints and failures by 60%, saving thousands of dollars in material and time.
    - Developed VR (Oculus Quest) and AR (Microsoft Hololens) interactive education solutions for Doctors using Blueprints and C++ in Unreal Engine, increasing realism and critical retention of lifesaving procedures.
    - Created mobile applications with Java and Android Studio to communicate via Bluetooth with embedded systems in 3D printed devices, improving capture speed and accuracy of patient measurements
    - Built, tested, and deployed RestAPI using Python, integrated custom engineering software with a web-based form for previewing custom-ordered parts. Hosted engineering software and Python RestAPI on an AWS EC2 instance, caching resulting 3D model parts on an AWS S3 instance.
- Developed hardware, communication, data flow and security requirements for additive medical 3d printing.
    - Integrated WooCommerce / WordPress e-commerce platform with Monday.com project management software using Zapier to automate task creation, ensuring minimal time between order placement and production.
    - Improved remote access to office equipment by setting up secure remote desktop access with NoMachine and Tailscale VPN. This allowed employees to access equipment 24/7, improving manufacturing turnaround times.
    - Defined user permissions for RBAC and monitored remediated DLP alerts using Google Workplace for Business to ensure employees had appropriate access to company data without compromising security.
    - Managed DNS rules for company domains using Google Domains, including setting DMARC rules and DNS records to ensure efficient email delivery and website access with minimal errors.
    - Spearheaded 24-hour employee troubleshooting help desk by creating an automated ticketing system on Monday.com and personally managing all technology issues, ensuring all company technology had 99.5% uptime.

Independent Work - *Freelancer*
April 2019 - March 2023

- Developed and deployed a link-shortening application using NextJS, Django, and PostgreSQL, including a native Android app in Java.
- Administered Ubuntu servers on cloud providers, including Contabo and AWS EC2, managed firewall rules in UFW, set up backups using Restic and R-Clone, and ran software updates to ensure high availability and security.
- Managed Docker deployments for custom container registry, web applications, and game servers on an Ubuntu server.
- Installed a DNS filter on a local area network using PiHole to improve network speed and security, significantly improving network performance.
- Engineered a virtualization server using Dell PowerEdge and PowerVault to provide NAS with TrueNAS and Ubuntu servers for the docker deployment of game servers in a local area network.

"John's Wizard Dungeon" Game Dev Team - *Project Leader, Gameplay Software Engineer*
January 2019 - April 2019

- Deployed a Perforce version control system on an Ubuntu VPS to facilitate team collaboration, allowing concurrent development of all team members.
- Coordinated a five-member team creating a VR Escape Room in Unreal Engine, resulting in a published game.
  - https://store.steampowered.com/app/1093750/Johns_Wizard_Dungeon/

EDUCATION

University of Central Florida - *BFA Emerging Media, Minor Computer Science*
September 2014 - April 2019

- Event Director (2017 - 2018) / Vice President (2018-2019) of student organization Game Dev Knights
  - Organized Multi-University Game Jams for 50-100 students, including securing a venue, catering, and equipment, resulting in 4 successful Game Jams over two years.
  - Petitioned SGA and raised thousands of dollars in scholarships to send dozens of Game Dev Knights club members to the Game Developer Conference over two years
  - Instructed classes on creating and implementing 3D assets using Maya, Substance Painter, and Unreal Engine, improving club members' classroom performance and career readiness.

Active Certifications
- CompTIA Security +