Ethan Vosburg

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SUMMARY

Broadcast engineer with over 8 years of experience who put himself through university while designing and integrating live remote IP-based workflows for internationally streamed sporting events. In-depth experience in working with sponsors, executives, and engineers on budgets, workflows, and setups under high-stress conditions.

EXPERIENCE

Vosburg Productions   Sacramento, CA
Founder/Operator   *Jan. 2018 – Present*

- Collaborated with Costco, Hoka, and other companies to produce video advertising content
- Formed multi-year relationships with loyal customers who consistently returned and recommended other clients
- Acted as project manager for multiple concurrent 2 quarter projects
- Hired and managed effective teams during events
- Found solutions to working with a tight budget to produce a 40+ camera stream for under $150,000

Western States Endurance Run | Live Stream Design, Remote Streaming, Managing

- Head Broadcast Engineer for 30-hour international broadcast with over a half million viewers
- Lead a multi-disciplinary team of technical production staff, volunteers, announcers, and company representatives during live event
- Developed systems for video streaming in wilderness locations using Starlink
- Communicated with sponsor and board representatives on technical capabilities of equipment to develop vision for the stream
- Acted as the escalation point for all technical issues while live

My Secure Advantage | Studio and Process Design, Documentation, Communication

- Mastered all production systems within a week in a previously unknown studio environment
- created thorough documentation establishing best practices and user guidelines
- Provided ongoing live support during service outages and set up systems to remotely troubleshoot and train staff
- Developed a maintainable and reliable studio to allow growth of recorded and live video content
- Communicated and advised executives on technical problems

Bayside Covenant Church   Granite Bay, CA
Video Engineer   *Aug. 2020 – Aug. 2023*

- Safely assembled and operated $200,000+ of filming equipment
- Developed software tools and procedures to organize servers and notify users of render errors
- Designed and constructed film sets to mimic living spaces for talk shows, advertisements, and educational content
- Produced, filmed, and edited a weekly video series with 300+ episodes

Bayside Live Events | Stream Design, Multi Quarter Project

- Managed all equipment for a large 12+ RED cinema camera live recording
- Built and coordinated all cameras and provided live support as problems developed
- Setup live camera control systems and resolved Dante issues on network
- Safely handled high-value camera equipment in transit
- 3D printed custom rigging for custom camera builds focused on mobile shooting

Bayside Studio Development | Studio Design, Multi-Quarter Project

- Worked with managers to build and maintain systems to stream and record media across multiple rooms in a 1.5 million dollar studio
- Designed and implemented logical network topology to facilitate editing off of a petabyte server with multiple editors
- Designed and constructed sets to be used for live production and multi-cam operations

Arroyo Instruments   San Luis Obispo, CA

Computer Engineer   *Nov 2023 – Present*
- Developed Matlab demo projects for clients to use and learn instrumentation
- Created a production testing device to accurately and repeatably measure laser diodes
- Communicated with upper management about product design and development choices
- Researched and prototyped new technologies to integrate into future products
- Developed Bluetooth APIs for new products

PROJECTS

Distributed System Designs | *PostgreSQL, REST, Production Server Management*   Jan. 2024 - Jun. 2024
- Developed production and staging environments with CI-CD event-driven architecture
- Maintained and developed heterogeneous environments consisting of databases, messaging and monitoring systems, web services, and web clients
- Responded to live incidents and set up monitoring and tooling to warn about degraded service
- Managed teams working on different feature implementations
- Communicated with multiple teams on prioritizing work to meet deadlines and feature implements

Hosting Infrastructure | *NGINX, Proxmox, Docker, DNS, DDNS, VPN, Hosting*   Aug. 2024 - Present
- Built and maintained 10+ servers that communicate together to host infrastructure
- Hosted services on a residential network using a DMZ and reverse proxy to limit network surface area
- Created a VPN using Twingate with multiple connectors to manage personal and client servers
- Hosted 6+ websites all over HTTPS with SSL certificates

Network Protocol Programming | *TCP, UDP, C, Unix, Wireshark*   Jan. 2025 - May. 2025
- Built a script that sniffs captured packets using the Wireshark API
- Built a TCP based app that allows multiple users to connect to a single server and communicate
- Built a UDP based app that implements TCP like features to stream data from one computer to another with error checking and correction

TECHNICAL SKILLS

Languages: Python, C, Matlab, LaTeX, System Verilog, SQL, Java, Bash, Spanish(Bi-literacy)
Programs: Fusion 360, Adobe Suite, Sketch-up, VS-Code, Magic VLSI, Vim, Vivado, Git, Davinci Resolve, Terminal
Hard Skills: Network/IT, 3D printing, Construction, Soldering, Electronics work
Interpersonal: Leadership, Management, Conflict Resolution, Managing High Stress, Team Work

EDUCATION

Cal Poly   San Luis Obispo, CA

Bachelors of Science in Computer Engineering   *Sep. 2023 – Jun. 2025*

Cal Poly   San Luis Obispo, CA

Masters of Science in Electrical Engineering   *(expected) Jun. 2025 – Jun. 2026*

Sierra College   Rocklin, CA

Associates Engineering, Physics, Mathematics   *Aug. 2020 – May 2023*