

BRIAN KUHN, B.S.

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San Jose, CA 95117

Willing to relocate to the Los Angeles area

SKILLS

Web Development:	Front-end frameworks (React/Redux), backend frameworks (express.js, python Flask), RESTful APIs, SQL and NoSQL databases
Programming Languages:	JavaScript/Typescript, Python, BASH, C/C++
Technologies/Software:	Docker, Kubernetes, Git/GitHub/GitLab, AWS, Networking (VLANs, DNS, VPN, Firewalls), Jira, Confluence
Technical Support:	Desktop/server/networking support, end-user assistance, hardware maintenance, server rack installations
Operating Systems:	Linux (Ubuntu/Debian, CentOS/RedHat, Arch), MacOS, Microsoft Windows (Desktop, Server)

WORK EXPERIENCE

ASRC Federal - NASA AMES Research Center March 2022 - Present
Site Reliability Engineer *Mountain View, CA*

- Work with team of site reliability engineers to provide 24/7 support to users of the Pleiades, Electra, and Aitken Supercomputers.
- Develop automation scripts and implement new monitoring systems to improve system reliability and coordinate with other technical teams.
- Maintain and write new documentation for internal procedures.
- Root access to the supercomputing systems.
- Actively monitor datacenter resources and respond to issues as-needed.

Infortech Corporation October 2021 - March 2022
Technical Services Associate *Santa Clara, CA*

- Work with team of technicians to provide desktop, server, and network support to client companies.
- Build, configure, deploy, and manage Windows servers for client and internal use.
- Create and disable client user email, Active Directory, and other software accounts as-needed.
- Actively monitor and manage client data backup systems.

Intevac Photonics September 2019 - October 2021
Junior FPGA Designer *Santa Clara, CA*

- Lead FPGA troubleshooting and debugging efforts and facilitate integration of product design with team managers.
- Coordinate with firmware, systems, and hardware teams to finalize projects and integrate final design.
- Write scripts to automate testing, tabulate errors, and calculate failure rate, as well as provide support to colleagues utilizing the scripts.

UC Davis - Risk and Safety Solutions October 2017 - September 2019
IT Services Assistant *Davis, CA*

- Coordinate with staff members to schedule times to assess hardware and software issues and contact customer support representatives if necessary.
- Develop custom PowerShell and BASH scripts to automate employee on- and off-boarding as well as streamline Microsoft Deployment Toolkit (MDT)/Jamf deployments to install software on new employee workstations.

WORK PROJECTS

NASA AMES Research Center:

I was responsible for leading my team on cleaning up several hundreds of terabytes of stale user data that was on our systems. This involved:

- Coordinating with several layers of management to determine scope of the project.
- Writing a highly detailed Standard Operating Procedure on how and when to perform the data cleanup.
- Collaborating with three Subject Matter Experts on the Systems Administration team to ratify the procedure.
- Instructing my team on how to do the procedure and develop special processes and tracking to efficiently and effectively process the backlog of stale user data.

I helped lead an effort on my team to organize our custom-written tools into version control and develop a more conducive development environment utilizing GitLab.

PERSONAL PROJECTS

Rent Calculator:

Can be seen at <https://rentcalc.briandkuhn.com>

Github repo: <https://github.com/brianslab/rentcalc>

Allows any number of roommates to enter their total rent and the fraction of the rent they each pay. Then, they may enter a list of communally purchased items which are factored in to how much each roommate owes for rent. It is built using Next.js with Typescript and deployed with Vercel. The state management is handled with Redux Toolkit.

Homelab:

My homelab consists of main server running Proxmox, a secondary backup server, a Windows Server for testing services used at work, a Raspberry Pi running Ansible scripts, and Ubiquiti networking equipment. On my Proxmox server, I have several virtual machines running:

- TrueNAS NAS storing personal media, backups, and my mother's videos for her business.
- Ubuntu server running various docker containers. Namely, PiHole for DNS, DuckDNS for dynamic DNS, Traefik as a reverse proxy with wildcard SSL certificates for local and external CNAME records, Grafana with InfluxDB for monitoring, VSCode Server to work on projects remotely, and Apache Guacamole for remote access.
- Ubuntu media server to host my mother's yoga videos for her business clients.
- Windows VM connected to my UPS running automated shutdown tasks.
- 10 CentOS VMs configured in a Kubernetes cluster to run future custom Docker containers on.

EDUCATION

University of California, Davis

B.S. - Electrical Engineering (ABET accredited)

June 2019