Bryce Jarboe

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OBJECTIVE:

Detail-oriented Computer Science graduate with a strong foundation in systems programming and low-level development. Proficient in C and C++, skilled at optimizing data structures and implementing efficient algorithms. Experienced in cloud infrastructure and virtualization, particularly with Linux systems. Passionate about delivering high-performance solutions and driving improvements in operational efficiency within a collaborative team environment.

EDUCATION:

Bachelor of Science, Computer Science	**Graduated with Distinction**
San Diego State University	**May 2024**

Relevant Coursework: Computer Networks, Systems Programming in C/C++, Operating Systems, Data Structures & Algorithms, Unix Administration, Computer Architecture, Software Development.

SKILLS:

Technical Proficiencies:
- *Programming Languages:* C/C++, Python, Java, *Object-Oriented Programming
- *Operating Systems:* Linux (Ubuntu, RHEL), Windows
- *Web Technologies:* HTML5, CSS3, React, Node.js
- *Tools & Platforms:* Git, VMware, Azure, GCC/G++, Visual Studio IDE

Linux Experience:
- Maintained servers running on: RHEL - Rocky, Ubuntu
- Service and process management: OpenBSD's systemctl, rcctl
- System monitoring with tools like netstat
- Automation through cronjobs for log rotations and system health checks
- LDAP server configuration and debugging
- Compiled and ran C/C++ programs in WSL/Ubuntu with gcc
- Developed C programs that directly interact with Linux through system calls for file I/O and POSIX threads
- Security and access control through SSH configuration: key-based authentication.
- Configuration and usage of Ansible, NFS

Strengths:
- Strong understanding of low-level programming and system internals.
- Proficient in optimizing performance-critical code.
- Experience with networking fundamentals and virtualization.
- Effective communicator, capable of collaborating in team-oriented environments.
- Analytical thinker with a strong problem-solving mindset.

SELECTED PROJECTS:

Race Condition Delivery System: C/C++, PThread lib, Multithreaded Programming
- Designed a multithreaded program simulating a producer-consumer model, ensuring synchronization and efficiency.

Reverse Assembler: C++, SIC/XE
- Developed a reverse assembler for converting machine code to assembly, enhancing low-level programming skills.

Automated Arduino Cooling System: C, Embedded Systems, Electrical Engineering
- Developed an embedded system using Arduino to automate cooling based on temperature sensor data.
- Implemented a custom statistical padding algorithm to stabilize sensor readings, effectively reducing noise and minimizing error in temperature measurements for precise control.

Home Ubuntu Lab: System/Network Management, Shell Scripting

- Designed and managed a personal Ubuntu-based automation lab, leveraging Bash and Python scripts for task automation.
- Automated daily tasks: system updates, backups, file organization, and network monitoring using cron and systemd.
- Created custom scripts for media management and cloud synchronization.
- Enhanced technical skills through practical use of open-source tools and automation frameworks.

WORK EXPERIENCE:

Python Automation Engineer: Freelance Contracts (Aug 2024 - Present)

- Developed automation tools to enhance operational efficiency, utilizing Python and AI technologies.
- Focused on creating scalable solutions tailored to client needs, emphasizing performance optimization.

System Administrator (Internship): Virgil - SDSU College of Sciences (Feb - May 2024):

- Managed a Multi-OS LAN environment with Azure and VMware, optimizing resource allocation and system stability.
- Configured and maintained network infrastructure, gaining hands-on experience with NFS, Git, and OpenBSD DNS.
- Developed automation scripts for system maintenance, improving reliability and reducing manual workloads.
- Acquired troubleshooting skills in live environments, ensuring minimal downtime and operational continuity.

Shift Lead: T&M Dao Inc (Aug 2019 - Present):

- Led a team in a fast-paced environment, coordinating operational tasks and enhancing service standards.
- Managed customer interactions, ensuring high satisfaction levels and resolving issues efficiently.
- Streamlined inventory management processes, contributing to overall operational efficiency.

References available upon request