# SAM MUSSER

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## SUMMARY OF QUALIFICATIONS

Dependable software/computer engineer with very strong interpersonal and leadership skills. Self-motivated with a team focused mindset.

LinkedIn: https://www.linkedin.com/in/sammusser

**Skills and Topics:** 

Bash, Embedded Linux, Git, OOP

Android (AOSP), Ubuntu, RTOS, Baremetal

Circuit Design, Schematic Review

Matlab, Multisim, Eagle

**Programming Languages:** 

C, C++, Java, C#, Python

**Peripherals Experience:** 

I2C, SPI, GPIO, RS-232, USB

### EXPERIENCE

Rosen Aviation | Software Engineer

July 2021 - Present | Eugene, OR

- Sustained and developed Rosen's internal Android Open-Source Project operating system across projects by writing applications, services, and plugins in C++, Java in an Ubuntu development environment (Custom command language, power management systems, threaded inter-process communication)
- Modified and implemented Linux kernel drivers with Raspbian and AOSP in C for video chain pipeline working in the kernel through the hardware abstraction layer (V4L2, MIPI, CSI)
- Led research and development on performing upgrades to new OS versions with dynamic memory allocation and incorporating enhanced security encryptions for video streaming
- Designed hardware specific software solutions for NXP's Arm Cortex series i.MX8MQ SoM and performed board bring-up (BSP, Uboot etc.)
- Facilitated future ease for project revisions and file system maintenance with Bash scripts
- Built and integrated custom library for network interface control and DHCP servicing for production applications in C# with .NET Framework automating systems and decreasing testing time with Iron Python
- Leader of the Rosen Sustainability Committee resulting in BRING Rethink Certification for the company and improving internal conditions

## Ascent Resources | Developer Intern

May 2021 – June 2021 | Oklahoma City, OK

- Scripted database transactions and performed SQL query optimization
- Overviewed network analysis with the systems administrator on Ethernet protocols
- Held private sessions with the VP of IT over leadership opportunities and professional development

## LEADERSHIP AND AWARDS

- Software Lead of the 65" Smart Display Project
- Software Lead of Cabin Management Systems and Video Streaming and Encryption R&D
- Distinguished Scholar Academic Scholarship as EMHS Valedictorian with 30 ACT score
- William H. Barkow Academic Scholarship for Electrical/Computer Engineers
- Ernest W. Reynolds Endowed Academic Scholarship for Electrical/Computer Engineers

#### EDUCATION

University of Oklahoma (OU) | Norman, OK

**Bachelor of Science in Computer Engineering** | May 2021

GPA 3.24 / 4.00

- Minor in Computer Science
- National Society of Collegiate Scholars
- OU Journey Program: Study Abroad in Arezzo and Rome, Italy featuring Art History and Climate Change
- Notable Courses: Algorithm Analysis, Cryptography, Digital Signal Processing,