

Nathaniel Skelton

Missouri University of Science and Technology – May 2021
B.S. Computer Science – 3.13 GPA

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Experience

Mars Rover Design Team (MRDT): Software Architect Rolla, MO: August 2017 – Current

- Designing long term development plan and architecture for both major software projects, Base-Station (C#, WPF) and Autonomy (Python, OpenCV)
- Establishing development practices to ensure stable development year after year
- Managed restructuring of Autonomy project codebase, including developing a defined state machine, to enable development and integration of obstacle avoidance using a Stereocam setup and Lidar, as well as a neural-net implementation to identify goal markers
- Maintaining development plan for Base-Station, the operations control center, involving a multiple display window expansion and overall considerations of UX design principles

Union Pacific (UPRR): IT Intern Omaha, NE: June – August 2019

- Developed external API platform for 8 of Union Pacific's internal services related to manifest shipment management for information integration into customer services
- Created endpoint schemas using Swagger, with heavy design emphasis on information clarity and simplicity to Union Pacific customers
- Collaborated with a team of 6 interns to develop standards across the implementation, and to create a repeatable process for future implementation for other service domains like intermodal

Associated Electric Cooperative Inc: Programming Intern Springfield, MO: May – August 2018

- Organized and completed project to migrate over 150 SSRS reports to Report Server 2016
- Reduced maintenance work for reports by culling the amount, removing over 50% of all reports
- Formatted reports to match a standard layout for ease of use and familiarity for business users as well as maintenance developers

Projects

Personal Website – Angular, JavaScript, HTML

- Established space to showcase my work, to develop experience in web frameworks, and to advance projects related to data analysis and visualization using D3

Swatched, Flood++ – Android, Java

- Created two android native apps, designed to assist artists and web designers develop and save color palettes easily
- Learned how to develop complete products, from idea to production on the Play Store

Smart Garden – Python, RPi

- Implemented a community garden control system using an RPi that monitors soil conditions and automatically waters appropriately according to rainfall forecasts

Pattonville School District (PSD) – Android, Java

- Worked with a team of 8 to develop a native apps (Android & iOS) for school district needs, improving the district's communication ability to parents, students, and the community at large

Computer Science Skills

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| • Android Studio | • Github/Git | • C# |
| • Visual Studio | • Java | • Python |