

SHAIL SHETYE

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WORK EXPERIENCE

Electrical Engineer – Amtrak

Oct 2020 – Present

Currently working on Positive Train Control (PTC), one of the control systems that prevents unsafe train movement. Mostly focusing on the Advanced Civil Speed Enforcement System (ACSES).

Duties include:

- Investigating train operation issues, safety issues, and delays caused by PTC to ensure safe operation and on-time performance.
- Participating in test trains for testing modifications to the field equipment or system software.
- Design, installation, testing, and day-to-day maintenance of the PTC system equipment onboard locomotives, on the wayside, and in the back-office.
- Working closely on projects and troubleshooting with other NEC railroads, contractors, and vendors.
- Projects include creating a central management server, contributing to a status monitoring tool for one of the wayside devices, using Docker to orchestrate and maintain internal system tools/infrastructure across multiple Linux servers.

Management Trainee – Amtrak

June 2019 – Oct 2020

A member of the Amtrak Management Training Program's fifth cohort. Earned Engineering, Transportation, and Mechanical qualifications. Did a Transportation rotation with Amtrak and MARC between Baltimore and Washington DC, and a Mechanical rotation in Sunnyside Yard, NYC. Also worked a long-term placement with the C&S Communications Engineering department.

Duties included:

- Maintained newly installed Eventide voice recorders used to record critical phone and radio channels, trained and supported users.
- Maintained and troubleshot issues that arose in telecom infrastructure in a timely manner.
- Helped with planning and reviewing designs for upgrades to infrastructure (fiber transport, new services, construction, etc.) at various offices, stations, facilities, and along the Right-of-Way.

Engineering Intern – Amtrak

May 2018 – June 2019

Worked in the C&S Department on Radio, Networking, Power, and other types of technologies. Also frequently worked in the field with installs, repairs, management, etc. along the Right-of-Way.

EDUCATION

M.S. Electrical Engineering – University of Colorado Boulder

June 2021 – Present

Expected graduation in 2024.

Completed coursework in: FPGA design, Internet of Things, semiconductor devices, Finance for Technical Managers, Project Management.

B.S. Electrical Engineering – Temple University

Aug 2015 – May 2019

Concentration in Computer Engineering

Completed coursework in: Electric Circuits, Digital Circuit Design, Processor Systems, Digital Signal Processing, Linear Algebra, C Programming, Embedded Systems Design, Java, Microelectronics, etc.

SKILLS AND QUALIFICATIONS

Advanced

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|------------------------------------|----------------------------------|--------------------------------------|
| - ACSES/PTC Systems and Equipment | - Communications Engineering | - Linux, Windows |
| - Railroad Experience | - Training users and maintainers | - Virtualization (Docker, ESXi, etc) |
| - NORAC, RWP, Mechanical/Blue Flag | - Writing Documentation | - Troubleshooting technical issues |
| | - Systems Testing/V&V | |

Intermediate

- | | | |
|-----------------------------------|-------------------|---------------------------------|
| - Python | - Web Development | - Computer Networking |
| - Bash, git | - Java | - Information/Software Security |
| - Data Science, Jupyter Notebooks | | |