Shail Patel

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Education

- **Rensselaer Polytechnic Institute,** (*RPI*) — *May 2021*
  B.S. Computer Science, B.S. Cognitive Science — GPA 3.5/4.0

Core Technical Skills

Languages: C, C++, C#, PHP, Python, SQL, Java, JavaScript, TypeScript, HTML, CSS, Zig, Rust

Software & Tools: Linux, git, CMake, CI/CD pipelines, Docker, VirtualBox, Ansible, LaTeX

Courses: Intro to Algorithms, Data Structures, Computability & Logic, Principles of Software, Operating Systems, Computer Communication Networks, Open Source Software, Computer Vision, Programming for Cognitive Science & AI

Work Experience

- **Lockheed Martin Rotary & Mission Systems**
  Software Engineer, Level 2 — *June 2021 – current*
  - Engaged in modern C++ development on a distributed system
  - Participated in an agile software engineering workflow
  - Developed and integrated GPU-accelerated signal processing chains through Nvidia CUDA toolkit
  - Designed and implemented a modular software architecture based on requirements, enabling rapid integration
  - Modified and integrated existing software modules to align with new specifications
  - Collected statistics on performance and resource utilization to create formal documentation used to meet customer set requirements
  - Communicated with program leadership and customer teams on the technical status of various subsystems
  - Assisted multiple test events through the setup, deployment, and collection of results on site and in the field

- **Submitty** — submitty.org
  Open Source Software Developer — *Spring 2018 – current*
  - Full stack development in a Linux, Apache, PostgreSQL, and PHP/python tech stack
  - Implemented a QR code scanner to detect student IDs, automating the batching of student exams and saving hours of manual data entry for instructors
  - Designed and developed an OCR system to detect handwritten student ids
  - Volunteered as a mentor for the organization during Google Summer of Code (GSoC) from 2019 to 2021

- **Cisco Systems**
  Technical Consulting Engineer — *January 2020 – June 2020*
  - Specialized in computer network engineering with a focus on troubleshooting customer equipment and networks
  - Racked, installed, and setup Cisco devices to build network replicas for issue reproduction
  - Worked with Cisco device configurations and basic layer 2 & 3 network protocols
  - Co-Managed a project to automate detection of common issues in Cisco WebEx by leading and teaching a group of new developers in python and automation tools

Publications

- A Graphical System For Logical Reasoning Using Existential Graphs — *RPI Cognitive Science Dept.*
  Shail Patel, Bram van Heuveln

- Facilitating Discussion-Based Grading and Private Channels via an Integrated Forum — *SIGCSE 2019*
  Andrew Aikens, Gagan Kumar, Shail Patel, Evan Maicus, Matthew Peveler, and Barbara Cutler

Certifications

- Cisco Certified DevNet Associate (*CCDevA*) — *May 2023 – May 2026*
  Demonstrated knowledge over DevOps, network automation, and API design and development

- Cisco Certified Networking Associate (*CCNA*) — *May 2020 – May 2026*
  Demonstrated knowledge and skills related to network fundamentals