JAMES HAYWOOD

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EDUCATION

Indiana University - Bloomington, IN — May 2026

Luddy School of Informatics, Computing, and Engineering — GPA: 3.75/4.00

Bachelor of Science in Computer Science

Intelligent Systems Engineering Minor, Systems Cognate

Relevant Courses: Data Structures, Computer Architecture, Systems Programming, Networks

WORK EXPERIENCE

ML Systems Integrator, Singapore — June 2024 – Present

Server Engineer (Full-time intern/Part-time remote)

- Provisioned, installed, and maintained an on-premises web hosting server, for both internal use and external clients.
- Completed all project milestones independently, on budget, and ahead of schedule, even in the face of changing requirements and technical unknowns.
- Communicated with my supervisor effectively and consistently to monitor progress and blockers.
- Assisted with a variety of other technical tasks as needed, including data translation and manipulation scripts to assist with an ongoing migration to a new CRM platform.
- Provided ongoing maintenance and support after conclusion of the internship.

PROJECTS

Deduct — April 2024

A graphical Fitch-style natural deduction proof checker, with support for modal logic.

- Designed and implemented a proof parser and checker for students in a symbolic logic course, at the suggestion of my professor.
- Tested, fuzzed, and subsequently debugged the above for correctness and crash resilience.
- Supported modal logic, unique among existing Fitch-style checkers.

Exemplar — September 2023

A library that makes storing Rust data structures in an SQLite database easy.

- Created multiple macros for instrumenting user-defined types with library code.
- Benchmarked, profiled, and optimized all interfaces to ensure minimal overhead. Achieved speeds of up to 1.6 million row insertions per second (25% faster than similar libraries.)
- Wrote extensive tests and documentation to ensure user friendliness and stability.

VEX Robotics — March – May 2022

- Implemented a variety of robotics algorithms – including odometry and pure pursuit – for use in competitive autonomous routines.
- Worked effectively towards competition readiness under heavy time constraints after joining the team late in the season.
- Attended the VEX world championship, placing third in the top division during qualifications and ultimately reaching the quarterfinals before being eliminated.

TECHNICAL SKILLS

Programming Languages: Rust, C, C++, C#, Java, SQL, Python + marginal HTML/CSS/JS

Development Tools: Linux, Git + GitHub, OCI containers, Bash/Fish scripting w/ GNU Coreutils

Miscellaneous: CAD, Embedded development (programming, electrical, 3D printing, etcetera)