

Nicholas R. Hein

135 S Court St.; Platteville, WI 53818 | 920.323.5113 | heinn@uwplatt.edu

Website: paradoxdev.com

Education

BACHELOR OF SCIENCE | UNIVERSITY OF WISCONSIN-PLATTEVILLE

MAY 2021

- Majors: Software Engineering (ABET Accredited), Mathematics
- Three-time recipient of William and Jean Sanders scholarship in math
- Cumulative GPA: 3.346 / 4.0

HIGH SCHOOL DIPLOMA | REEDSVILLE HIGH SCHOOL

MAY 2017

- Graduated with honors; AP Scholar with Distinction
- Cumulative GPA: 3.739 / 4.0

Skills & Abilities

DEVELOPMENT

- **Environments:** Proficient in Linux/Unix environments with GIT-driven CI/CD
- **Hardware:** Accustomed to many kinds of workstations, servers, embedded systems, and hardware tools
- **Languages:** Fluent in C, shell scripts, C#, Java, and PHP with experience in assembly languages, C++, and Ruby
- **Concepts:** Experienced in containerization, emulation, virtualization, and DevOps
- **Automation:** Familiar with automated software integration, building, testing, packaging, and deployment

FIELDS

- **Low-Level:** Versed in circuit design, computer architecture, and firmware development
- **Kernel-Level:** Educated in kernel development and network stacks
- **Application-Level:** Knowledgeable in ABIs, APIs, blockchain, machine learning, databases, and web servers/applications

Accomplishments

- **Research:** Began an independent research project focused on creating a decentralized network layer protocol for the Linux kernel removing the need for ISPs
- **Competition:** Qualified for the 2017 National FBLA “Game and Simulation Programming” competition in California
- **Work:** Led full-stack web projects including a staff directory, an interactive campus map, a profile editing tool, a donation system, a course listing web portal, and general back-end endpoint construction
- **Projects:** Engineering independent projects including a drone with open-source hardware and software, an open-source retro game engine (written in C), a personally-hosted server, and an 80’s arcade game
- **Contracting:** Created websites for my school district and a local flooring company

Organizations

- UW-Platteville Men’s Cross Country and Track 2017-Present
 - Wisconsin Intercollegiate Athletic Conference Scholar
- Pioneer Student Athletic Advisory Committee 2018-Present
 - Leadership role with community service emphasis

Experience

WEB DEVELOPMENT INTERN | ARIENS CO.

MAY 2020-AUG. 2020

- Worked with engineering, marketing, and administrative needs simultaneously to produce final products
- Wrote back/front-end for web applications in a business environment

AVIATION EMBEDDED GRAPHICS INTERN | GARMIN INTL.

MAY 2020

- Hired in September 2019 to write kernel code to support multi-GPU functionality in aviation display units
- Internship was cancelled due to the COVID-19 pandemic

STUDENT WEB DEVELOPER LEVEL 3 | UW-PLATTEVILLE

SEPT. 2017-MAY 2020

- Collaborated with a team to develop full-stack web applications
- Customer service involves helping end-users troubleshoot and compile requirements for projects