

Josiah S. Bruner

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Computer science engineering student graduating in April 2018 with more than two years of combined experience in software and security engineering. Interested in full-time security engineering positions for after graduation in technology and/or automotive industries.

Experience

Lear Corporation / Cybersecurity Engineering Intern

May 2017 - PRESENT, ANN ARBOR, MI

- Responsible for research, design, and implementation of an in-house CAN network intrusion detection system that will be provided as options to automotive OEMs.
- Created the "Threat Analysis and Risk Assessment (TARA)" process and co-authored the corresponding template used to analyze internal programs.
- Performed TARAs on various programs which found (and suggested mitigations to) many security issues.
- Technical lead for a formal analysis of static analysis tools in order to improve security quality across the global organization.
- Research and implementation of secure "Over-The-Air" update frameworks (e.g. Uptane).

HARMAN International / Software Engineering Intern (Navigation)

May 2016 - April 2017, NOVI, MI

- Navigation product engineering for high-end, QNX-based, automotive infotainment systems.
- Designed, built, and supported an internal, automated, navigation testing infrastructure that caught several critical crashes before entering production.
- Developed a code performance analysis library for use in several projects.

Lathrup Industries / Software & Database Developer

JANUARY 2015 - SEPTEMBER 2016, NOVI, MI

- Co-created Lathrup's internal database system (using Intuit's QuickBase service). Built API wrappers for various languages to be used in many in-house applications. System valued at \$200,000 / year.
- Found a security vulnerability in a third-party's server-side document generator application and replaced it with a client-side, in-house version. This saved the company >\$1000 / year.
- Created an automation server which performs various tasks for the company automatically. This reduced work employees were required to perform and increased procedural reliability, valued at > \$55,000 / year.
- Designed and implemented the company's website. lathrupindustries.com
- Built various in-house applications used with our database. This included a time clocking system used by all employees and a task management system.

Education

The University of Michigan / College of Engineering / Senior / BSE Computer Science

CURRENT - APRIL 2018, Ann Arbor, MI

Potentially Relevant Classes (*italics* indicates currently enrolled)

Intro To Programming, Programming and Data Structures, Discrete Math, Data Structures and Algorithms, Intro to Cryptography, Intro to Computer Organization, Foundations of Computer Science, Intro to Computer Security, *Intro to Operating Systems, Web and Information Systems.*