

## 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. Primarily interested in full-time security or software engineering roles in automotive, technology, or aerospace / defense industries.

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### *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](http://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 / Senior / BSE Computer Science / 3.2 GPA**

CURRENT - APRIL 2018, Ann Arbor, MI

##### **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.***