Josiah S. Bruner

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Computer science engineering student graduating in April 2018 with more than two years of experience in software engineering and security engineering. Interested in full-time security engineering positions for 2018 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 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 Systems.***