

# Lucas Biery

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[github.com/Tiecoon](https://github.com/Tiecoon)

## Education

Rensselaer Polytechnic Institute  
Bachelor of Computer Science

August 2016 – December 2019  
(Expected)

## Work Experience

**Manticore Developer** *Trail of Bits*

May 2019 – August 2019

Worked on improving usability and bug fixing of the symbolic execution engine Manticore.

**Advanced Technology Laboratories Intern** *Lockheed Martin*

May 2018 – August 2018

Worked on an internal research and development project

## Projects

**B7** [gitlab.com/Tiecoon/B7](https://gitlab.com/Tiecoon/B7)

An open source rewrite in rust of an internal RPISEC tool

Performs side channel attacks on certain executables, by reasoning about program input using the instruction count of many executions

**BBS** Project for program analysis class

Implements a program constraint extractor using Binary Ninja's MLIL in SSA form

Produces SMT-LIB formatted constraints on variables to reach a certain point in a program

**Magic Mirror** [github.com/MrLever/MagicMirror](https://github.com/MrLever/MagicMirror)

A summer project with a friend to collect info from APIs we want and display on a monitor powered by a Raspberry Pi, using HTML CSS and JavaScript

## Interests

Reverse engineering, binary exploitation, hardware hacking  
System administration, software development

## Languages

C, C++, Rust, Python, Go, JavaScript,  $\text{\LaTeX}$

## Activities

Member and current System Administrator of RPISEC - RPI Computer Security Club

- Compete in CTFs and help teach skills at weekly meetings
- Work on rewriting RPISEC infrastructure to use modern provisioning tools, such as ansible
- Help orchestrate infrastructure during meetings and internal CTFs

Participate in wargames in my spare time

- Some wargames I participate in include reversing.kr, Microcorruption, pwnable.kr, and OverTheWire
- Comptia A+ and Security+ certified