alex bellon

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EDUCATION

2021–Present **Ph.D., Computer Science**, *The University of California San Diego*
Advised by Deian Stefan and Pat Pannuto, with a focus on the security of embedded and IoT devices

2017–2021 **B.S., Computer Science**, *The University of Texas at Austin*

2017–2021 **B.S., Mathematics**, *The University of Texas at Austin*

PUBLICATIONS

[2] **Alex Bellon**, Alex Yen, and Pat Pannuto. "TagAlong: A Free, Wide-Area Data-Muling Service Built on the AirTag Protocol". The 24th International Workshop on Mobile Computing Systems and Applications (ACM HotMobile 2023). February 2023.

[1] **Alex Bellon**, Alex Yen, and Pat Pannuto. "Demo Abstract: A Free, Wide-Area Data-Muling Service Built on the AirTag Protocol". The 20th ACM Conference on Embedded Networked Sensor Systems (SenSys 2022). November 2022.

[0] **Alex Bellon**, Alex Snoeren, and Deian Stefan. "Hacking for Fun and Glucose: Reverse Engineering an Insulin Pump". SRC TECHCON 2022. September 2022.

INDUSTRY EXPERIENCE

Summer 2023 **Software Engineering Intern**, *Micron*, San Jose, CA
- Working with CXL memory, more details to come

Summer 2020 **Security Engineering Intern**, *Mozilla*, Mountain View, CA (remote)
- Researched security issues in language-based package managers like Cargo, NPM and PyPI
- Evaluated possibility for maintainer account takeover, code compromise, and vulnerability exploitation
- Used research to fix security scoring algorithm on Mozilla's Dependency Observatory (*github.com/mozilla-services/dependency-observatory*) project, used to estimate the security of NPM packages

Summer 2019 **Security Analyst Intern**, *Electronic Arts*, Seattle, WA
- Used Python to automate checking for open ports and other attack vectors on EA's cloud instances.
- Scanned 800+ instances, found 1400+ security incidents sending summary of vulnerabilities to affected parties, with descriptions of the vulnerabilities and instructions to resolve them

TEACHING EXPERIENCE

Spring 2021 **Undergraduate TA - CS349 Contemporary Issues in Computer Science**,
The University of Texas at Austin
- Graded assignments and held office hours for a class of 40+ students
- Shared resources and information regarding ethical and social issues in computer science

Spring, Fall 2019 **Undergraduate TA - CS361 Introduction to Computer Security**,
The University of Texas at Austin
- Created and graded security-focused assignments for 80+ students
- Lectured on various topics in security including cryptography and data forensics
- Wrote, hosted and ran a CTF competition for the students' final exam

TECHNICAL SKILLS

Most comfortable in Python, C and C++; familiar with Java assembly (M68K, x86), MySQL, JavaScript, HTML/CSS and Haskell.

Comfortable with Linux (Ubuntu, Arch/Manjaro) and UNIX, Shell (`bash`, `zsh`), `git`, `vim`, `emacs` (including `org-mode`), LaTeX, Ghidra (scripting), LLVM (writing passes) and command line tools. Familiar with Wireshark, `gdb`, Kubernetes and Docker.