

Calvin Deutschbein (they/them)

CONTACT INFORMATION

Willamette University
Department of Computer Science
Computing & Data Science
Ford Hall 206
900 State Street
Salem, OR 97301

Work: +1-503-xxx-xxxx
Fax: +1-503-xxx-xxxx
E-mail: ckdeutschbein@willamette.edu
E-mail: calvindeu@gmail.com
Website: cd-public.github.io/

RESEARCH INTERESTS

Mining Secure Behavior of Hardware Designs: specification mining, data mining, machine learning, computer security, cybersecurity, hardware security, secure design, security validation, computer architecture hardware design languages (HDL), information flow tracking (IFT), logics of specification, register transfer level (RTL), instruction set architecture (ISA), hyperproperties, reduced instruction set computers (RISC), complex instruction set computers (CISC), x86, temporal logics, linear temporal logic (LTL)

CURRENT ACADEMIC APPOINTMENTS

Assistant Professor, Willamette University
Department of Computer Science
Computing & Data Science

August 2021 to present

PREVIOUS ACADEMIC APPOINTMENTS

Adjunct Professor, Elon University
Department of Computer Science
• **CSC 130 Computer Science I**

January 2020 to May 2020

Research Scholar, Semiconductor Research Corporation
SRC Research Scholars Program

October 2018 to August 2021

- **Tasks:**
 - **Tackling the Corner Cases: Finding Security Vulnerabilities in CPU Designs**
 - **Automatically Generating Information Flow Properties**
- **Liasons:**
 - **Intel Corporation**, Hillsboro, Oregon
 - **Mentor Graphics (now: Siemens EDA)**, Wilsonville, Oregon

EDUCATION

The University of North Carolina at Chapel Hill, Chapel Hill, NC

Ph.D., Computer Science, August 2021

- **Thesis:** *Mining Secure Behavior of Hardware Designs*
- **Advisor:** [Cynthia Sturton](#)
- **Area:** Hardware Security

M.S., Computer Science, August 2017

- **Thesis:** *Multi-core Cyclic Executives for Safety-Critical Systems*
- **Advisor:** [Sanjoy Baruah](#)
- **Area:** Real-Time Systems

The University of Chicago, Chicago, IL

B.S., Computer Science, March 2015

- **Thesis:** *Performance and Energy Limits of a Processor-integrated FFT Accelerator*
- **Advisor:** [Andrew A. Chien](#)
- **Area:** Computer Architecture

B.A., Mathematics, March 2015