Email : becgabri@umich.edu

Gabrielle Beck

Education

- **Johns Hopkins** — Baltimore, MD
  PhD Computer Science (In Progress) — *Sept 2018 - Present*
  Advisor: Matthew Green
- **University of Michigan** — Ann Arbor, MI
  Bachelor of Science — *Sept. 2014 - April 2018*

Experience

- **Microsoft** — Redmond, WA
  Software Engineer Intern — *May 2018 - July 2018*
  - **Creating an SPA**: Created a single page application for internal use by Microsoft employees, using D3 and a rich internal database
- **University of Michigan** — Ann Arbor, MI
  EECS 388 Instructional Aide — *Sept. 2017 - April 2018*
  - **Teaching Students**: Held a discussion section once a week to go over homework, introduce projects, and clarify understanding of topics covered in class. Held Office Hours for further clarification and helped with projects.
  - **Grading Assignments**: Designed a grading rubric, and reviewed student assignments to see how well they align with those requirements.
- **University of Michigan** — Ann Arbor, MI
  Research Assistant — *April 2017 - Aug 2017*
  - **Developing a Webpage**: Worked on integrating a webpage into a currently existing website. Worked with developing CSS, page design, and available user features using a javascript graphing API called D3.
  - **Researching Certificate Authorities**: Did research on Certificate Authorities, the x509 standard, baseline requirements and their failures, and other details pertaining to CAs and the Web public key infrastructure.
  - **Testing Web Layout**: Before gaining access to official tools did testing with the NodeJS framework for setting up a webserver on localhost and used the middleware, express, for routing.
- **University of Michigan** — Ann Arbor, MI
  EECS 203 Instructional Aide — *Winter 2016 - Spring 2017*
- **Oakland University** — Rochester, MI
  Student Researcher — *Summer 2016*
  - **Researching Attacks on Physical Layer Security**: Read papers and watched seminars relating to security in general while also going into depth in the area of physical layer security and methods for extracting secret keys for cryptographic operations from a channel between a transmitter and receiver.
  - **Machine Learning**: Used Machine Learning to attempt to predict channel impulse responses , using measurements taken from surrounding receivers to a given transmitter. Used Matlab's statistical learning software package for coming up with guesses for values taken by keys.

Programming Skills

- **Languages**: Python, Javascript, C, C++, Golang, Matlab, C# **Technologies/Tools**: GitHub, Unity, D3

Publications

- Deepak Kumar, Zhengping Wang, Matthew Hyder, Joseph Dickinson, Michael Bailey, Gabrielle Beck, David Adrian, Zakir Durumeric, J. Alex Halderman. **Tracking Certificate Misissuance in the Wild**. 39^{th} IEEE Symposium on Security and Privacy (Oakland 2018), San Franciso, CA. May 21-23,2018.