

ADRIAN STOLL

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EDUCATION

University of Michigan

Ann Arbor, MI

Bachelor of Science in Engineering in Computer Science Engineering

April 2019

GPA: 3.976/4

Coursework: Operating Systems, Machine Learning, Algorithms, Security, Cryptography, Abstract Algebra

EXPERIENCE

University of Michigan EECS Department

Ann Arbor, MI

Internet Censorship Research Assistant

September 2017 – Present

- Designed and deployed system for detecting censorship of popular websites in over 100 countries
- Wrote measurement tools to remotely detect censorship of HTTP and HTTPS traffic
- Ran longitudinal tests for 1,000+ domains in 100+ countries from 10,000+ network vantage points to identify country-specific censorship mechanisms and policies
- Setup storage backend for censoredplanet.org to publish current and historical datasets

Autograder Programmer

May 2017 - August 2017

- Developed API used by 200+ students to make submitting homework in Jupyter notebooks easy
- Created website for viewing assignment schedules, grades, and downloading previous submissions

PROJECT EXPERIENCE

Course Projects, University of Michigan

- Implemented a preemptive multi-threading library and network file system
- Used convolutional neural networks to classify images of food

Independent Projects

- Implemented HTTP/1.1 protocol from scratch to learn how the web works
 - Client (github.com/adrs/http1.1):
 - Encrypts and authenticates requests using OpenSSL to secure connections
 - Provides library for POST requests to allow data upload to server
 - Decodes chunked encoding to support streaming responses
 - Server (github.com/adrs/httpserver):
 - Supports caching using “Last-Modified/If-Modified-Since” to reduce server load
 - Maintains thread pool to service up to 1000+ requests/second
 - Uses persistent TCP connections to reduce latency for sequential requests
- Designed search engine to find and display media files on my personal server
 - Created media player for listening to results using jQuery
 - Integrated mp3 ID3 tag parsing to allow searches of file meta data such as track title and artist
- Invented new methods for creating “evercookies” (persistent browser tracking mechanism)
- Developed filter based on Bayes classifier to block clickbait headlines
- Wrote Android app to export SMS/MMS chat history (github.com/adrs/ExportSMS)

ORGANIZATIONS

Eta Kappa Nu (IEEE Honor Society), Wolverine CTF Club, FIRST Robotics Team 3322

SKILLS

Languages: C, C++, Python, Go, HTML, JavaScript, Java, SQL, Bash, Scheme, MATLAB/Octave

Software: LaTeX, Jupyter, Tensorflow, Sklearn, Slack, Git, Vim, Chrome Developer Tools, Excel

Platforms: Linux (Ubuntu, RedHat), Windows, Android, Google Cloud