

# Vi Grey

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## WORK EXPERIENCE

### Software Engineer, Technology Researcher, & Speaker

Independent

2014 - Present  
Rochester, MN/New York, NY

- Created a research lab to actively develop skills and knowledge in technology and technology history
- Set up and taught Cryptography workshops in Minnesota, New Jersey, and New York
- Writes blog articles about technology, security, and information theory
- Gives presentations about projects and research

### Software Engineer & Information Security Engineer

Excel Manufacturing

(Contract) Summer 2015  
St. Charles, MN

- Developed internal sales and support ticket management application to improve productivity of sales and support teams
- Encrypted database information and hashed passwords with bcrypt to protect against data breaches
- Managed firewall rules and SIEM infrastructure to prevent and detect network and system infiltration attempts
- Set up AWS virtual servers to test application deployment before running those applications in production environments

### Systems Administrator & Web Developer

Jon Hassler Theater

Fall 2011 - Winter 2013  
Plainview, MN

- Created a web-based boxoffice ticket reservation system to improve work productivity
- Developed and maintained website, increasing page traffic by over 800% and average engagement time by over 500%
- Managed computer systems and networks to keep business operations functioning

## PROJECTS

### NESZIP

2018

- Proof of Concept tool that makes an NES ROM that is also a ZIP file that contains a copy of its own source code

### Modem-Tap

2017

- Network middleware audio engine written in Go that emulates a network connection though a Bell103 dial-up modem

### Latchbox

2014 - 2017

- Password manager written in Go that uses a console based user interface

### rcube

2013

- A Python module that solves scrambled Rubik's Cubes

## PRESENTATIONS

- **There's a ZIP File in My NES Cartridge** — 16 Feb 2018 — DEFCON 201 Technical Meeting — Hoboken, NJ
- **Phishing for Root** — 20 Oct 2017 — DEFCON 201 Technical Meeting — Hoboken, NJ
- **Fair Results From an Unfair Coin** — 12 Oct 2017 — NYC Python Lightning Talks — Manhattan, NY
- **Attacking Your Two-Factor Authentication** — 8 Jun 2017 — K-LUG Technical Meeting — Rochester, MN

## LANGUAGES AND TECHNOLOGIES

- Go, Python, Bash, Javascript, HTML, CSS, JSON, XML
- Linux, Unix, Windows, CentOS, RHEL, AWS, AngularJS, Node.js, TLS, Git, SQL, MongoDB, MySQL,  $\LaTeX$