

William Zhang

✉ willzhang05@gmail.com
📁 willzhang05.github.io
GitHub: @willzhang05

Education

- 2018–2021 **University of Virginia**, B.S., Double Major in Computer Science and Computer Engineering.
Completed: Digital Logic Design, Discrete Mathematics, Multivariable Calculus
Current: Program and Data Representation, Mathematics of Information, Fundamentals of Electrical Engineering I, Linear Algebra
- 2014–2018 **Thomas Jefferson High School for Science and Technology**.
Accelerated Computer Science, AP Computer Science, Analog & Digital Electronics, Parallel Computing, Artificial Intelligence

Experience

- 2018–Present **Technical Consultant**, *Lancium LLC*, Houston, TX.
Help develop demonstration HPC clusters using Ansible and SLURM for the company's Series B. The cluster responds to periods of surplus and non-surplus wind energy production using intelligent job migration.
- 2018–Present **Distributed Systems Research Assistant**, *UVA Department of Computer Science*, Charlottesville, VA.
Assist Dr. Andrew Grimshaw in developing the Campus Compute Cooperative (CCC). Currently developing tools for modified job submission to SLURM.
- 2019–Present **Discrete Mathematics Teaching Assistant**, *UVA Department of Computer Science*, Charlottesville, VA.
Work with Professor Kevin Sullivan and eleven other undergraduate teaching assistants to hold office hours, answer student questions, and grade exams and homework for CS 2102.
- 2018–2019 **Systems Engineer Intern**, *UVA Department of Computer Science*, Charlottesville, VA.
Supported departmental research through Unix systems and resource management.
- 2018 **Network Engineer Intern**, *Cypress Consulting*, Arlington, VA.
Developed tools for Juniper Junos automation using lxml, Juniper pyEZ, vMX, vSRX, and KVM/QEMU.
- 2016–2018 **Student Systems Administrator**, *Fairfax County Public Schools*, Alexandria, VA.
Managed school's mission-critical Linux systems and networking in the TJCSL (Computer Systems Lab) with a team of other student sysadmins.
- Led design and deployment of configuration management with Ansible
 - Assisted in completely restructuring virtualization infrastructure
 - Rebuilt HPC cluster management with SLURM

Activities

- 2018–Present **Embedded Systems Team CAN Bus Lead**, *UVA Solar Car*, Charlottesville, VA.
Lead development of embedded software to communicate with the various car subsystems over CAN.
- 2018–Present **Fellows Committee Member**, *Hereford Student Senate*, Charlottesville, VA.
Assist with Hereford Residential College's UVA faculty and alumni outreach efforts through event planning and organization.

Languages

- English **Native**
Chinese **Native speaker**
German **B2, 5 years experience**

Skills

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|---------------|--|---------|--|
| Programming | Python, C++, Shell, Go, C, Java, Rust | Web | HTML, CSS, JavaScript, Flask, Django |
| Applications | Libvirt, Nginx, Kerberos, Ansible, Salt, SLURM | Systems | Linux, FreeBSD, Cisco IOS, Juniper Junos |
| Miscellaneous | Computer Hardware, Photography | | |

Projects

- 2016–2018 **Public AMT Relay Research** *Project presented at IETF 101 in the MBONED PIM WG.*
- 2018 **TapIn** *Mifare Classic NFC authentication concept for Django created at HackTJ 2018. Won Best Web App.*
- 2018 **junos-netjson** *Junos op script to return netJSON based on LLDP information.*
- 2017 **SSH FailLog** *Live heatmap of failed SSH login attempts based on GeoIP.*
- 2017 **Cryptoticker** *Cryptocurrency Market Ticker Alexa Skill, deployed via Zappa to AWS Lambda.*