

William Zhang

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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 Electronics, Digital Electronics, Parallel Computing, Artificial Intelligence

Experience

- 2018–Present **Technical Consultant**, *Lancium LLC*, Houston, TX.
Help develop a demonstration HPC cluster 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 and low power state management.
- 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.
- 2018–Present **Systems Engineer Intern**, *UVA Department of Computer Science*, Charlottesville, VA.
Support 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 Member**, *UVA Solar Car*, Charlottesville, VA.
Currently helping develop CAN bus communication between the various car subsystems.
- 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** *99th Percentile on AATG Level 4 National German Exam*

Skills

- 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 IT Support, Cybersecurity, 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.*
- 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.*
- 2016 **CSConcept** *Design concept for a platform to share CS opportunities. Won school-wide design competition.*