

David Z. Chen

Naperville, IL · (630) 386-5091 · davidzc2@illinois.edu · [linkedin.com/in/davch](https://www.linkedin.com/in/davch) · davidchen.ml

EDUCATION

University of Illinois at Urbana-Champaign | Grainger College of Engineering

August 2018 – May 2022

- Bachelor of Science in Systems Engineering and Design GPA: 3.67/4.00
 - Minor in Electrical and Computer Engineering with a concentration in Telecommunications
- *Awards and honors:* Illinois State Scholar, Dean's List (6 semesters)
- *Relevant coursework:* Computer Systems & Programming, Analog & Digital Signal Processing, Control Systems, Data Structures, Deterministic Models in Optimization, Operations Research, Business Side of Engineering, Fields & Waves

SKILLS

- Adept with Python, C, HTML, CSS, JavaScript (TypeScript), Angular, MATLAB, LabVIEW, Simulink, and SQL utilizing Jira, Confluence, Visual Studio Code, Docker, GitHub, GitLab, Power BI, Visio, and VMware vSphere ESXi in Windows, Mac OS X, and Linux environments with experience in Fusion 360 (CAD), iBwave (RF design), and Google Apps Script.
- Amateur Radio Operator (Extra Class), Lean Six Sigma White Belt certified, along with professional spoken Chinese and moderate Spanish proficiency. Also versed in photography, cinematography, and full-stack web development.

EXPERIENCE

TechX Intern, RF Engineering | T-Mobile US, Inc. | Downers Grove, IL

February 2022 – Present

- Currently working on 5+ mobile network venue designs and alternative coverage solutions across the entire Midwest region involving WCDMA/UMTS, 4G LTE, and 5G NR with mmWave using iBwave design software and internal tools.
- Designing non-macro sites such as small/pico cells and in-building DAS projects spanning multiple buildings and sectors in addition to special event deployments while thoroughly documenting design procedures using Visio and SharePoint.
- Building robust Power BI compliance tracking dashboard with 6 database integrations utilized by the entire team to audit, validate, and monitor 300+ monthly site builds while providing relevant information to stakeholders.

TechX Intern, Software Engineering | T-Mobile US, Inc. | Bellevue, WA

October 2021 – February 2022

- Developed a full-stack web application utilizing an Angular frontend and Python (Flask) backend to facilitate employee requests for specialized trainings with a two-level approval/denial system based on a catalog of user-provided entries.
- Incorporated material design, NxJS, RxJS, RestX API with Swagger UI, and MySQL database (SQLAlchemy) along with a NGINX reverse proxy and Azure SSO (MSAL) for user authentication. Deployed using Docker and began implementation of CI/CD pipelines between staging and production environments for linting, unit testing, and static code analysis.
- Established relevant Objectives and Key Results (OKRs) aligned to the organization utilizing WorkBoard with the team, contributing to over \$800,000 in savings and risk reduction through process improvements and budget stewardship.

UofMagenta Intern, Systems Design Engineering | T-Mobile US, Inc. | Bellevue, WA

May 2021 – October 2021

- Created a Jira dashboard in Confluence, providing a unified area for issue navigation with live metrics and drill-down capability detailing all team activity, ultimately presenting it to an audience of 46 peers and of senior leadership.
- Transitioned entire team to Jira's Agile project management workflow, consolidating all 1000+ tasks into three main categories, enabling rapid escalation of critical issues and comprehensive bug tracking while eliminating manual tracking of intakes in cumbersome shared Excel sheets, reducing the average backlog time to hours instead of days.
- Wrote awk command to interpret text files into YAML for use in Ansible and modernized team SharePoint site.

System Administrator Intern | Zhuhai Trinomab Biotechnology Co., Ltd. | Zhuhai, China

June 2019 – August 2019

- Rectified internal network security, enhanced employee workstation performance, streamlined daily computing operations, and integrated company email services. Also imaged and deployed 20 new laptops for employees.
- Devised an extensive plan with a coworker for the incumbent IT department outlining procedures for updating critical infrastructure, training employees on fundamental cybersecurity practices, and implementing daily backups.

System Administrator Intern | EpimAb Biotherapeutics, Inc. | Shanghai, China

June 2018 – August 2018

- Restructured intranet while collaborating in a team of 3, slashing network latency in half. Also audited 45 pieces of critical lab equipment, utilizing the existing inventory labeling standard to centralize location data for easy access.
- Gave a final presentation to executives and employees to raise awareness of ransomware and cybersecurity procedures to mitigate it which resulted in an 85% reduction in successful external phishing and scam attempts.

Computer Service Specialist | Chicago Computers, Inc. | Naperville, IL

August 2017 – March 2018

- Diagnosed and repaired computers and other electronics, working directly with over 100 unique companies and customers through consultation, house calls, and remote assistance, resulting in a 95% client retention rate. Also ensured proper recycling of used electronics while recovering working components, reducing e-waste by 350 lb overall.
- Configured and deployed an office-wide VoIP phone system using FreePBX which doubled ticket turnover rate.

Network Engineer | Five Star Tennis Center | Plainfield, IL

October 2017

- Overhauled core network which boosted throughput by 15%, reduced downtime to 1% per year, and eliminated security vulnerabilities. Also expanded wireless network coverage, allowing for seamless roaming in the entire building.

System Administrator | Tech Auto Service, Inc. | Downers Grove, IL

May 2011 – February 2022

- Designed and built all computer systems, video surveillance equipment, and crucial network infrastructure, configuring internal software when necessary for the family business.

ACTIVITIES

Eagle Scout | Boy Scouts of America - Troop 222 of Naperville, IL

May 2011 – Present

- Coordinated the troop and its scouts, earned merit badges, developed crucial life skills, and organized an Eagle Project to give local homeless shelter residents vital access to computing resources. Held positions of Patrol Leader, Assistant Senior Patrol Leader, Historian, Scribe, Troop Guide, and Leave No Trace Coordinator.

Webmaster | Institute of Electrical and Electronics Engineers (IEEE) UIUC

September 2018 – Present

- Revamped the IEEE UIUC chapter website (ieee.illinois.edu) and created a weekly newsletter for members.

Student Representative | Naperville City Council Riverwalk Commission

September 2017 – August 2018

- Partook in monthly meetings with a team of 11 other representatives from all levels of the city government to help recommend and implement plans for the development and use of public resources along the DuPage River.
- Assisted in submitting a proposal to city leadership to conduct a structural assessment on Moser Tower with additional testing and evaluation in order to determine the root cause of the carillon's deterioration.