

David Lin Chen

Email: dchen65535@gmail.com ◊ GitHub: TheEgghead27 ◊ LinkedIn: david-lin-chen

EDUCATION

Yale University, New Haven, CT Beginning Aug 2025

Prospective Electrical Engineering Major; Awarded the Yale Engineering & STEM fellowship.

Stuyvesant High School, New York, NY Sep 2022 – Jun 2025

Graduated with Regents Honors Designation, Mastery in Science & Math; GPA: 98.5; ACT: 36/36

LEADERSHIP & ACTIVITIES

Wireless & Mobile Networking Lab (WiMNet) at Columbia University, New York, NY Jun 2024 – Aug 2024

Research Intern (PI: Professor Gil Zussman, Advisors: Abhishek Adhikari, Kevin Hermstein)

- Expanded upon prior work to architect the backend for a web-based React.js GUI control panel for the IBM Research PAAMs with MATLAB-rendered beam pattern visualizations.
- Collected hundreds of rooftop spectrum consumption measurements from wireless deployments spanning the Columbia and CCNY campuses for spectrum-sharing analysis.

Wireless & Mobile Networking Lab (WiMNet) at Columbia University, New York, NY Jun 2023 – Sep 2023

Research Intern (PI: Professor Gil Zussman, Advisor: Abhishek Adhikari)

- Developed a Python library to perform and automate beam-steering experiments with GNU Radio, USRP SDRs, and 28 GHz mmWave phased-array antenna modules (PAAMs) from IBM Research.
- Co-hosted laboratory technology demonstrations for K-12 STEM educators under the COSMOS project.

Stuyvesant ARISTA, New York, NY Jun 2023 – Jun 2025

Honors Society Member

- Tutored fellow students at the AP level in Biology, Chemistry, Computer Science, Physics, and European History.
- Volunteered a variety of charity fundraisers for Alzheimer's, Down Syndrome, and Multiple Sclerosis patients.

Stuy Linux, New York, NY Aug 2022 – Jun 2025

Co-Founder

- Founded a novel club about Free and Open Source Software (FOSS) and the GNU/Linux ecosystem.
- Taught a plethora of lessons on FOSS technology such as modern command-line interfaces (CLIs), GPG encryption, networking protocols, and web hosting, with live demonstrations and capture-the-flag challenges from PicoCTF and our custom server.

Stuyvesant Student Union, New York, NY Oct 2021 – Jul 2025

Director of IT (Promoted from IT Member in June 2023)

- Conceptualized and deployed the Epsilon StuyActivities platform, encompassing services such as a club catalog and membership management system, that a student body of thousands use on a daily basis.
- Created and taught instructional material to introduce novice members to our technology stack, including JavaScript, React.js, command-line interfaces, and Git/GitHub.

SKILLS

Software Packaging, CI/CD, Git, C(++), Node.js, React, Python, Rust, SQL, L^AT_EX, MATLAB, SDR, Automation

CONFERENCES & PROJECTS

Demo: Experimentation with Mobile 28 GHz Phased Array Antenna Modules: ACM Mobicom '24 Dec 2024

We present experiments using a mobile 64-element PAAM package, including beam sweeping and OFDM linkage. A graphical user interface is made available for configuring the PAAMs. (DOI: 10.1145/3636534.3698841)

Web Hosting with NGINX and Debian: 2024 Stuy x BTHS Girls Who Code Tech Talk (Stuy Linux) Jun 2024

NGINX and Debian are industry standard FOSS projects that can be used to host a web stack in a cloud environment.

28 GHz mmWave for Joint Sensing and Communications: Poster at MIT URTC 2023 (WiMNet) Oct 2023

JSAC will allow future beyond-5G/6G mmWave small-cells to perform vehicle sensing/guidance in smart cities.