Sida Cheng

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Education

Carnegie Mellon University – Pittsburgh, PA — Expected May 2027
B.S. in Electrical and Computer Engineering
B.S. in Engineering Design, Innovation and Entrepreneurship
GPA: 3.82/4.0 — **Dean's List:** Spring 2024, Fall 2024, Fall 2025

Experience

Founder — Jan 2025 – Present
OS Keyboard — Pittsburgh, PA
- Founded ergonomic keyboard startup and sold 40+ units at $100 each, delivering a 5.2% win rate boost and +0.21 K/D improvement for competitive gamers
- Grew Bilibili channel to 3K followers and 250K+ views; built a 4,000-member QQ community to drive sales and collect user feedback
- Advanced to 2026 McGinnis Venture Competition final round; won Innov18 Award at CMU Build18 2025

Founding Engineer — June 2025 – Aug 2025
Kirend – XbotPark Summer Camp — Dongguan, China
- Led technical development for a startup team, designing and building the physical and electrical prototype for a smart dice tower with integrated sensors, LEDs, and speakers
- Developed camera-based dice detection system and wireless device-to-mobile-app communication
- Won 1st Prize at XbotPark hardware startup camp, securing ¥500,000 (∼$70K) follow-on investment

Teaching Assistant — Aug 2024 – May 2025
Carnegie Mellon University — Pittsburgh, PA
- Taught circuit fundamentals and labs to 200+ students in Intro to ECE; created soldering guidelines
- Mentored 60+ students on prototyping and project scoping in Intro to Engineering Design

Owner — Dec 2020 – Mar 2021
Stanley50z Keyboard Studio — Beijing, China
- Sold 200+ items generating $3,000+ revenue in 4 months with 100% positive reviews; secured $1,000+ monthly contract from 3rd largest keyboard retailer in Dongbei region
- Managed group buy for 50+ customers: sourced from 10+ factories, ordered 500+ parts, fulfilled all shipments

Projects

OS Keyboard – Ergonomic Keyboard Hardware and Software
- Designed custom PCBs (EasyEDA, KiCad) and 3D-printed enclosures (SolidWorks); architected QMK and ZMK firmware in C on STM32, RP2040, and nRF52840 microcontrollers
- Built web-based keyboard configurator (React, TypeScript, Vite) with WebHID API for real-time key remapping and joystick tuning without firmware reflashing

Robot Card Dealer – CMU Build18 Hackathon — Jan 2024
- Led 3-person team to design, prototype, and build an automatic card dealer in 7 days
- Integrated Arduino with stepper motor for card feeding; designed card-separation mechanism

Skills

Programming: C, Python, Java, TypeScript, JavaScript
Hardware and Design: EasyEDA, KiCad, SolidWorks, QMK, ZMK, Arduino
Web: React, Vite, WebHID API
Languages: English (Proficient), Mandarin Chinese (Native)