Sida Cheng

(612) 475-0059 | sidac@andrew.cmu.edu | https://sidacheng.com

Education

Carnegie Mellon University Expected May 2027
B.S. in Electrical and Computer Engineering Pittsburgh, PA
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
- Won 2nd Place (Undergraduate Track) at 2026 McGinnis Venture Competition; won Innov18 Award at CMU Build18 2025

Founding Engineer, Hardware Jan 2026 – Apr 2026
MyoVerse – CMU AI Venture Studio Pittsburgh, PA

- Designed flexible-PCB electrode hardware for a gel-free surface EMG platform supporting real-time muscle-activation analysis across patches, straps, sleeves, and apparel
- Advanced venture to Forge to Field Pitch Competition finalist with partnered research at UPMC and LOIs from NIH, AHN, UC Irvine, UHN, and Ochsner Health

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

SPARK – Local-AI Writing Companion Peripheral Spring 2026

- Built USB-HID peripheral firmware, local LLM inference pipeline, and PC daemon for typo correction, tone adjustment, expansion, and autocomplete via keystroke emulation
- Designed cross-platform system architecture for privacy-preserving AI text actions running locally across Windows, macOS, and Linux

GRO-BOT – Smart Algae Bioreactor Spring 2026

- Designed ESP32 sensing and control stack for desktop photobioreactor measuring CO2, O2, airflow, temperature, and humidity over BLE
- Achieved ∼18% mean CO2 removal and 0.34 g/L/day biomass productivity in a 14-day autonomous run

Skills

Programming: C, Python, Java, TypeScript, JavaScript
Hardware and Design: EasyEDA, KiCad, SolidWorks, STM32, RP2040, nRF52840, ESP32
AI Tools: Claude Code, Codex, OpenClaw, MCP Connectors