

David (Seheon) Chang

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Education

University of Texas at Austin

Bachelor of Science in Computer Science

Bachelor of Science in Electrical and Computer Engineering

Aug 2023 – Expected May 2028

Austin, TX

GPA: 3.6/4.0

Experience

Ajou University School of Medicine

Clinical AI Research Intern

Jun 2024 – Sep 2024

Suwon, South Korea

- Co-authored 2 SCI-indexed JMIR papers with 11 citations by building BERT and GPT-based NLP pipelines for public-health text.
- Cut CDM ETL runtime by 23% by porting R pipelines to Python and replacing repeated row-wise lookups with hash joins, improving complexity from $O(N \times M)$ to $O(N + M)$.

LooxidLabs

Project Intern | Product Analytics

Jun 2022 – Jan 2023

Seoul, South Korea

- Analyzed data from 200+ alpha testers for a VR mental-health device and translated tester feedback into product validation, branding, business strategy, and patent development recommendations.

Projects

Ajou Course Manager | Django, Docker, React, PDFMiner, OpenAI API, PostgreSQL

Oct 2025 – Feb 2026

- Developed and maintained a production course manager platform for Ajou University School of Medicine, serving 40+ professors, 200+ students, and 100+ courses.
- Automated administrative tasks by implementing CRUD workflows and bulk XLSX imports/edits, saving professors 10+ hours per week.
- Integrated AI-driven PDF parsing and data extraction using OpenAI API, reducing manual review time by 25%.

Tessera | ESP32, C/C++, PN532 NFC, PySide6, AES-256-GCM, SQLCipher

Mar 2026 – Present

- Led a team that placed 7th of 700 in the ROK Army Startup Competition by building an offline Electronic Health Record dog-tag system.
- Engineered ESP32 firmware to read and decrypt compressed AES-256-GCM records in under 0.1 second, and developed a PySide6/SQLCipher desktop app for offline serial provisioning.

Sisyphus | C#, .NET 8, WPF, Windows Registry, Windows Internals (IFEO)

Apr 2026 – Present

- Engineered and launched a WPF focus utility using C#/.NET 8 and Windows Internals (IFEO), reaching 60+ downloads within the first week of V1.0 release.
- Built context-aware AI workflows that convert user activity and natural-language input into structured tasks, reminders, and feedback.

Alpaca Trading Bot | Python, SQLite (WAL), Streamlit, systemd, Telegram API

Jan 2026 – Present

- Deployed a continuously running Python trading engine and Streamlit dashboard as independent systemd services with automatic restart, journald logging, and SQLite WAL concurrency.
- Automated real-time paper-trade execution using Alpaca market data and delivered trade, fill, and failure alerts through Telegram.
- Median Alpaca API round-trip latency reduced by 250 ms through benchmarking VPS regions and deploying the system in New Jersey.

Leadership & Activities

2nd Infantry Division Sustainment Brigade

KATUSA Sergeant (E-5), Brigade Unit Ministry Team

Jun 2025 – Dec 2026

Camp Humphreys, South Korea

- Provided tactical translation for the United Nations Command during ROK-U.S. combined exercises.
- Earned the Army Commendation Medal and Army Achievement Medal for consistent and excellent translation support.

Faculty Applicant Interviewer

Chandra Family Department of Electrical and Computer Engineering

Spring 2024

University of Texas at Austin

- Participated in 10 faculty hiring interviews after being recommended by faculty and the advisory board.

Texas Convergent

IoT Build Team Tech Member

Spring 2024

University of Texas at Austin

- Launched an NFC-authenticated alarm system and pitched it to 200+ students and an Austin-based VC.

Directed Reading Program

Natural Language Reasoning Team

Spring 2023 – Spring 2024

University of Texas at Austin

- Led weekly reading discussions on CoT and o1-style reasoning papers, covering 17 papers with UT CS Ph.D. mentorship.

Skills

Programming Languages: Python, C++, C#, TypeScript, JavaScript, Java, C, ARM Assembly

Frameworks & Systems: .NET, AWS, Django, Docker, Git, Kubernetes, Linux, Next.js, Node.js, PostgreSQL, React, SQLite, Streamlit