

Ian Lingo

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EDUCATION

Texas State University *B.S. in Computer Science*

San Marcos, TX
Graduated: May 2026

- **GPA:** 3.58
- **Minors:** Applied Mathematics, Mass Communication
- **Honors:** Cum Laude, IEEE-HKN Honor Society (Eta Kappa Nu), TXST Honors College
- **Coursework:** Data Structures, Algorithms, Object Oriented Programming, Database Systems, Software Engineering, Linear Algebra, Computer Architecture, Internet Software Development, Computer Graphics, Computer Vision

San Jose State University – Open University *Advanced Python Programming*

San Jose, CA
Jun. 2026 – Aug. 2026

TECHNICAL SKILLS

Programming Languages: Python, Java, C++, SQL, JavaScript, TypeScript, MIPS, R
Frameworks/Tools: React, Next.js, Flask, Spring Boot, Gradle, Jupyter Notebook, ROS2, Docker, YOLO, OpenCV
Cloud/DevOps: Git, GitHub, GitHub Actions, CI/CD, AWS, OCI, Atlassian (Jira, Bitbucket), Vercel, Firebase
Data: PostgreSQL, SQL Server, BigQuery, Tableau, Pandas, NumPy, Plotly
Operating Systems: Linux (Ubuntu), Windows, macOS
Certificates: Google Data Analytics, OCI Foundations, AWS Cloud Practitioner (In progress)

PROJECTS

Chess Game Application | *Java, Spring Boot, PostgreSQL, Docker, AWS EC2, JUnit 5* Jul. 2024 – Present

- Engineered a **full-stack** Java chess app (Swing client + Spring Boot REST API) with a multi-module Gradle build and a from-scratch **AI opponent** using negamax (alpha-beta + quiescence) that grades every move across **6 quality tiers**.
- Built an Elo-rated leaderboard on a PostgreSQL REST API; containerized with Docker and **deployed to AWS EC2** with an API-key guard, covered by **20 JUnit 5 tests** (Mockito + Testcontainers) in a GitHub Actions CI pipeline.

MARS Robot | *ROS2, Embedded Systems, Python, C++, YOLO, ML, Computer Vision* Sep. 2025 – May 2026

- Directed a **17-member** IEEE RAS engineering team in Agile Scrum to develop an indoor service robot platform using NVIDIA Jetson Orin Nano, ZED 2i, RPLidar A1, ToF sensors, CAD, and embedded motor control.
- Built and deployed a **YOLOv11 Nano ML & CV pipeline** from a **229-image annotated Roboflow dataset** into a ZED 2i camera pipeline for real-time detection of visually similar industrial makerspace machines.
- Developed **C++ PWM motor-control firmware** on Teensy 4.1 and integrated it with **Python ROS2 software** for perception, human tracking, and Xbox teleoperation through Jetson-to-Teensy communication.
- Integrated, **tested, and debugged** hardware/software interfaces across embedded control, sensors, and ROS2 systems.

IEEE TXST Website Platform | *Next.js, TypeScript, Tailwind CSS, Vercel, Cloudflare* Dec. 2025 – May 2026

- Led a **7-member** student development team to design, build, and deploy a production web platform for IEEE Texas State University using Next.js 15 (App Router), replacing a legacy WordPress site serving **100+ users**.
- Developed responsive UI with Tailwind CSS, Framer Motion, and interactive components (Swiper), and configured Cloudflare DNS, custom domain routing, and automated **Vercel CI/CD deployment**.
- Implemented **SEO and performance optimizations** (metadata, sitemap, robots.txt, OpenGraph, image optimization).

Weather Forecasting App | *Python, JavaScript, React, Flask, Firebase, Supabase* Sep. 2024 – Jan. 2025

- Developed a responsive **full-stack** weather app with React and Flask, implementing geolocation search, real-time updates, dark mode, Firebase hosting, Supabase backend integration, and API caching that reduced latency by **60%**.

EXPERIENCE

Geek Squad Advanced Repair Technician Jun. 2026 – Present *Best Buy* San Jose, CA

- Diagnose, troubleshoot, and repair **PCs, Apple devices, and Windows/macOS/Linux systems**; use/document **Apple GSX** repair workflows, build computers, and explain technical solutions to clients as an **Apple-certified technician**.

Director, Vice President, Treasurer, and Co-Founder Aug. 2024 – May 2026 *Boko Hackathon, IEEE, IEEE-HKN, and IEEE RAS Chapter* San Marcos, TX

- Developed **C++ movement-control software** and **Python AprilTag computer-vision code** on a **5-member robotics team** that placed **2nd out of 25 universities** at the IEEE Region 5 Robotics Competition.
- Co-founded IEEE Robotics & Automation Society (RAS), scaling to **100+ members** and directing a **17-member team**.
- Raised **\$12K+** from Google, Dell, BrainTrust, UFCU, IEEE, and Charles Schwab via sponsorship outreach.

Team Lead and Learning Ambassador (Operations Associate) Jan. 2021 – Jul. 2025 *Amazon* San Antonio, TX and Austin, TX

- Led and trained a **10+ member** outbound team, tracking **10,000+ packages** daily, verifying shipment accuracy, and implementing process improvements that reduced truck dispatch time by **50%** in a fast-paced environment.