

CASEY S. KENAN

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EDUCATION

Columbia University, School of Engineering and Applied Science

New York, NY

B.S. in Computer Science, Combined Plan Program | Expected 2028

Providence College

Providence, RI

Physics Major Coursework / Pre-Engineering Track | GPA: 3.84 | Sept. 2023 - May 2026

Honors and Awards: Dean's List | Sigma Pi Sigma, National Physics Honor Society

Relevant Coursework: Data Structures (Java), Electronic Devices with Lab, Scientific Programming, Linear Algebra, Differential Equations, Modern Physics with Lab

TECHNICAL SKILLS

Programming: C++, Python, Java, Kotlin

Engineering / Tools: ESP32, ESP-NOW, embedded systems, circuit design, sensors, precision soldering, Autodesk Inventor (CAD), 3D printing, Android Studio, Git/GitHub

ML / Data: TensorFlow Lite, OpenWakeWord, pandas, NumPy, JiWER, data analysis, Excel automation

ENGINEERING EXPERIENCE

Baxter International - Software Engineering Co-op, Offline Doctor Dashboard & Audio ML

May 2026 - Aug. 2026

- Built an offline voice-controlled doctor dashboard for the Qualcomm-based Rhino T105 tablet, enabling patient-profile navigation and clinical-note updates without cloud APIs.
- Researched and developed a custom OpenWakeWord training pipeline, integrating Whisper and pretrained SpeechBrain speaker verification to activate the application and grant access to enrolled users.
- Developed and trained an OpenWakeWord model for Qualcomm QNN deployment; monitored JVM, native, PSS, and driver memory usage.

RELEVANT PROJECTS

ESP32 Automated Irrigation System - Baxter International, C++ / Embedded Hardware

May 2026 - Aug. 2026

- Spearheaded Baxter's facility irrigation system, owning node architecture, control-circuit design, precision soldering, custom 3D-printed sensor enclosures, C++ firmware, and hardware/software debugging.
- Engineered a three-ESP32 system: an Ethernet-connected controller retrieved time data and sent Gmail notifications; a transmitter controller read soil moisture and sent data packets; a receiver controller acted on received moisture data to open or close the normally closed solenoid valve.
- Researched all required components online to minimize cost while meeting system performance requirements.

Quantitative Stock Ranking System - Personal Project, Python

Jul. 2025 - Present

- Built a Python-based quantitative stock-ranking system for U.S. technology companies, combining peer-relative valuation, historical price-trend metrics, sub-industry benchmarks, and market-regime classification.
- Developed point-in-time backtesting and portfolio-simulation tools using pandas, NumPy, yfinance, and openpyxl to evaluate ranking performance, liquidity limits, turnover, drawdowns, and benchmark-relative returns.

LEADERSHIP

Providence College Student Congress - Elected Representative

Sept. 2025 - May 2026

- Elected to represent student interests and participate in student-government and campus-governance discussions.

Providence College Society of Physics Students - Treasurer

Sept. 2024 - Aug. 2025

- Managed club finances, forecast funding needs, and allocated funds for technical projects, meetings, and events.

ADDITIONAL EXPERIENCE

NYS Licensed Real Estate Salesperson - USA Referrals Inc.

Jul. 2024 - Present

Food Runner - Costantino's Venda Bar & Ristorante

Sept. 2025 - Feb. 2026

Restaurant and Catering Busser/Runner - Rosalie's Cucina

Jul. 2023 - Jul. 2025

Piano: Trained with pianist Sang Woo Kang at Providence College; compose original music.