

Yair Flores

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EDUCATION & CERTIFICATIONS

Kennesaw State University, Southern Polytechnic College of Engineering

Marietta, GA *Bachelor of Science in Computer Engineering with focus on Software Engineering*

Cum laude, May 2021

Southern Methodist University, Cox School of Business - LCAP (Latino Career Acceleration Program)

Udacity, Full Stack Engineering Nanodegree

Agile Center of Excellence, Leading SAFe Agile Certification

TECHNICAL SKILLS & KNOWLEDGE

Proficient in Python, JS, Node.js, C/C++, C# / .NET, React, NextJS

Experienced in VHDL, ASM (Assembly Language), MATLAB, Java

Software: Figma, SPARK, HDFS, Snowflake, Eclipse, Cloud9, Visual Studio, IDLE, Wire Shark, SolidWorks, FTP applications, SSH/Telnet client applications, IBM Planning Analytics, Docker, Kubernetes

Technical Knowledge: Advanced Embedded Design, Computer Interfacing, Software Design & Architecture, UI/UX, Software Testing & QA, Network Devices, Network Protocols, Electronics Circuit Analysis, Control Systems, Data Collection & Analysis, Engineering Business Economics

Foreign Languages: Fluent Spanish, Limited French

PROJECTS & RESEARCH

2021 AT&T Symposium Hackathon: *Python, Linux, PIR Sensors, Networking, HTML, RaspberryPi4*

Sept 2021 – Oct 2021

- Demo of live platform created: <https://youtu.be/wm2v1kewGB8>
- Used Commercial-Off-The-Shelf (COTS) components and open-source software, to create smart IoT connected home lighting control and Light-Based Cues with AI to learn as you work in a WFH environment.
- System adapts to presence of user and flashes lights to alert times for breaks from working as well as for various environmental changes, such as emergencies, holidays, and intruders.

Undergraduate Senior Project: *Python, Linux, Networking, ML, PCB Design & Print*

August 2020 – May 2021

- Developed, lead, and managed a group of four engineers as Project Manager in creating start-up tech company TriFit, using Commercial-Off-The-Shelf (COTS) components and open-source software, mixed with proprietary printed PCB boards and software, a simple and modern approach to optimization of bodybuilders and those with body goals through feedback for dietary recovery post workout and meal plan using macronutrients, giving an optimal track for faster results with the freedom of food choice. Oversaw the entire development and rollout of the company, assets, scheduling, resources, and human capital to complete with deadline deliverables while steering towards the end goal.
- Main device features a gyroscope, accelerometer, heart rate, blood oxygen, and force sensors on a daughterboard interfacing with a Raspberry Pi Zero W with Qi wireless charging and 2000 mAh battery. This device inputs sensor values and uses ML with TensorFlow backend to then transmit information over BLE to the mobile phone app and display information such as nutritional regeneration information received from custom a custom selfhosted REST API.

V2X Undergraduate Research: *Python, Node JS, Linux, Networking, Docker, Kubernetes, HTML, BananaPi R2*

June 2020 – May 2021

- Demo of live web platform created: <https://youtu.be/OrBc7ursPf8>
- Developed Using Commercial-Off-The-Shelf (COTS) components and open-source software a solution to reduce the Total Cost of Ownership (TCO) of Vehicle-to-Everything Roadside Equipment (V2X-RSE) as well as deployment, testing and platform creation.
- Innovated a proxy server which connects out to the networks of RSE & OBE with a web platform for developers to code, test, and deploy new functionality and features to RSE using connected VPN and internet facing web portal.
- Deployed COTS V2X-RSEs at multiple locations with Kubernetes deployment supporting IoT edge computing and demonstrating the capabilities of the COTS V2X-RSE, including custom Docker Registry (OwlBoxHub) with custom ARM containers.

PROFESSIONAL EXPERIENCE

AT&T

Atlanta, GA

System Engineer / Software Engineer

June 2023 – Present

- Spearheaded the development of E2EUX (End-to-End User Experience) Status application, a critical tool designed to foster a customer-centric operational culture and enhance reliability capabilities.
- Managed all aspects of development, including data architecture, engineering, UI/UX design, and stakeholder management, to lead a potential 25% improvement in operational efficiency.
- Conducted regular demos and iterations with stakeholders, gathering feedback and ensuring alignment with business needs on projects.
- Implemented an iterative development process, incorporating stakeholder feedback into development cycles, fostering a collaborative environment, and ensuring the successful adoption of new tools and technologies.
- Architected and developed a sentiment recording application for frontline employees, to reduce Mean Time To Resolve (MTTR) Outages and issues by a minimum of 45%. Engineered the application using FastAPI within a Python-based Azure Function App, ensuring a robust and scalable architecture capable of handling thousands of concurrent users.
- Seamlessly integrated MongoDB with Go, JS, and Python-based APIs, optimizing data storage and retrieval for over 1 million feedback entries.
- Led Figma initiatives to enhance UI/UX design processes, resulting in a 30% improvement in user interface efficiency and overall user experience for various applications.
- Developed a dynamic feedback system that presents role and location-specific issues, enhancing relevance and user engagement by 50%.

TDP Software Engineer II – Big Data Solution Engineer / Product Development Engineer

July 2021 – June 2023

- R&D engineering for innovative first to market POC products utilizing 5G and Fiber infrastructure, including but not limited to, fiber modem insights for IoT, and 5G precise location positioning.
- Engineered solutions for various data validation initiatives, including 5G C-Band SA/NSA, LTE congestion analysis, and innovative next-gen telecommunication.
- Pioneered, tested, and released AT&T SPAC— a custom API application to pull and analyze AT&T national user-level RAN data (covering Ericsson/Nokia, 130+ million users, 5 million connected vehicles, 180TB daily data). This initiative is an AT&T internal open-source project used by 3 VP organizations, 8 teams, and 50+ projects and tools across AT&T. This application replaced a vendor purchased software package in part of a larger initiative to actively validate and verify user cell service quality with a 2021 Cost Savings Impact of \$2.25 Million.

Frontline to IT service for North American service desk with occasional international relations.

- Set up, install, and maintain desktop and laptop: printer hardware/software plus peripherals, site network file structures, access rights, network security, network users, network printing and desktop user environments, Microsoft accounts, setup Microsoft applications, troubleshoot issues, and providing end-user technical support using remote tools.
- Configure and support the LAN, WAN and wireless networking devices with specific reference to Cisco/Meraki hardware.
- Maintain standards around virus protection, general software licensing, approved software and hardware use and global compliance standards and procedures.

LEADERSHIP EXPERIENCE

Undergraduate Senior Project, Project Manager

Atlanta AT&T Innovation Lab, Co-Founder

- Co-Founded and actively manage ATLab, an innovation Laboratory suited with all professional and applicable tools needed to create a product from ground up, including but not limited to 3D Printing, Electrical Testing, Hardware Engineering, Software Engineering, Marketing, & Design, with over \$4,500 budget and available access to over 100 users.

DINE! Atlanta, Participation Coordinator

- Coordinate meetings and insure swift and proper execution for national level initiative to connect and network TDP and Flex-Work co

Latino Career Accelerator Program (LCAP), Cox School of Business, Southern Methodist University

- Completed an intensive program focused on transitioning to management and excelling at higher levels of responsibility. Acquired advanced strategies in managing change, building resilience, and developing a personal brand to build trust and influence within the organization. Enhanced communication skills and the ability to lead and motivate teams.