

**Luke Balogun**  
[Portfolio](#)

**EDUCATION + CERTIFICATIONS**

Baylor University (3.7 GPA) (4 years)

Studied Biology

La Universidad de Cuyo (6 weeks)

Studied Spanish, MCAT, Programming Languages

Played overseas Basketball

University of Texas Health San Antonio School of Medicine (1 year)

Studied Medicine

AWS Developer Associate, AWS Security, AWS DEVOPS

**EXPERIENCE**

Alaska Airlines / Remote

Senior Software Engineer Lead — Mar 2023 – Present

AI-Powered ACARS Messaging Platform:

- Led full-stack development of a real-time ACARS messaging platform using .NET 8, React, and Azure SQL with AI-based anomaly detection for message integrity and performance monitoring.
- Integrated Azure Cognitive Services (Text Analytics, Language Detection, Sentiment Analysis) to enhance operations dashboards and improve airline communication insights.
- Used Azure OpenAI and Azure Machine Learning to prototype models that assist in message classification and predictive routing based on historical telemetry data.
- Enabled smart alerting and diagnostics using AI-driven telemetry and log analytics.

DevOps + MLOps Automation:

- Created CI/CD pipelines using Azure DevOps with YAML and Terraform for ML model deployment, infrastructure provisioning, and app release management.
- Dockerized ML APIs and containerized inference models for seamless rollout across multiple environments.

Legacy AI/ML Upgrades:

- Refactored legacy systems to use AI-enhanced search and recommendation features using Elastic Search with NLP tuning and integrated them via secure OAuth/JWT APIs.
- Introduced AI-driven user behavior tracking to recommend actions for flight operations based on historic data.

Tech Stack: .NET 8, React, Azure AI, Azure ML, Azure DevOps, Docker, Terraform, Entity Framework Core, OAuth 2.0, JWT, Informix, jQuery, SQL, REST APIs, CI/CD, OpenAI API

**Ameriprise / Remote**

**5/2018 – 3/2023**

**ET Sr. Full Stack Developer Lead**

Worked on the portal system and framework.

- Use .NET framework, Python, and go in order to complete development dealing with money movement transfers.
- **Dynamic leader and collaborator**, consistently bridging communication between engineering teams, business stakeholders, and product management for high-visibility software launches. Managing and owning offshore team with **Onshore/Offshore Model**
- Developed Platform for developing money movement between managed and brokerage accounts.
- Use SQL to query and maintain database for optimal performance
- Modernize UI and web applications to latest versions of Angular (> v.16)
- Leverage NgRx for redux architecture and store, DI, testing, binding, directives for Angular

- Leveraged XML and SOAPUI services
- Creating flowsheets/workflow in IGrafx tool.
- ASP.NET Web API calls to legacy systems using XML and SOAPUI
- Implemented React Redux Architecture through redux-thunk
- Participated in leading the team as participating as scrum master and project manager for the team

Technical Environment: .NET, .NET Core 3.1, C#, Go, Python, Javascript, Typescript, AngularJS, Angular, ReactJS, React, React Native, Angular, ASP.NET CORE Web API, ASP.NET, Microsoft Visual Studio, SQL Server Management Studio, XML, SOAPUI, SQL, IFS, Web API, Legacy, IIS Server, IGrafx, Apache Web Server, Maintenance Server, SQL Server Reporting Services, Machine Learning, AI, Azure, AWS, Elastic Search, Service Bus, Single Sign-On, OAuth 2.0, SAML, Multi Factor Authentication, Policy Management, Identity and Access Management, Web Application Firewall or API Management, Okta, Azure Active Directory, Auth0

### **Epic Systems / Ardent Healthcare Systems**

**11/2017 -5/2018**

#### **Applications Engineer (consultant)**

Epic is a privately held healthcare software company. According to the company, hospitals that use its software hold medical records of 54% of patients in the United States and 2.5% of patients worldwide.

- Application Engineer that consulted with doctors and nurses and gather information about multiple problems that persisted with Epic software.
- Developed specific widgets and dashboards by using WPF
- Certain SPAs for web applications were leveraged through AngularJS and NodeJS.
- MUMPS, was used in order to garner and save a repository of patient information.

Technical Environment: Angular JS, Node JS, C#.NET, .NET Core 2.0, Microsoft Visual Studio, Microsoft SQL Server, SSRS, MUMPS, Windows Presentation Foundation, EPIC Orchard, FHIR

### **AVG Antivirus, Atlanta, Georgia**

**9/2017 – 11/2017**

#### **Application Engineer (consultant)**

AVG Technologies develops and sells online service solutions and Internet security software worldwide under the AVG branded name.

- Generate dashboards through the .NET framework, ASP.NET MVC 5, ASP.NET WebAPI, SQL, and Azure
- Using dashboards and web services, AVG endpoints deployed
- Cloud services with Microsoft Azure and Amazon Web Services

Technical Environment: Angular JS, Node JS, C#.NET, MVC, ASP.NET, WebAPI, Microsoft Visual Studio, Microsoft SQL Server, SSRS, LINQ, jQuery, Azure, AWS, Sharepoint

### **Sava Senior Care, Houston, Texas**

**6/2014 – 7/2014**

#### **Tech Analysis**

Sava is one of the largest providers of short-term and long-term health care services in the United States. Through their affiliated entities, Sava provides services through skilled nursing facilities across the country.

- Added features to Sava's internal web application, SavaCentral (.NET, SQL Server)
- CareCentral, a WPF application deployed at kiosks throughout Sava's facilities.
- Updated/Redesigned the user interface/XAML, created new dialogs and user controls
- Created/modified SSRS reports for display within the WPF application.

Technical Environment: C#.NET, Windows Presentation Foundation, SQL Server Integration Services, Microsoft Visual Studio, Microsoft SQL Server, Microsoft Team System, Model-View-ViewModel Pattern

### **Dr. Shuford's Research Lab in Molecular Modeling**

**2/2013– 5/2016**

#### **Research Assistant**

Computational research group that specialize in modeling and simulation of interdisciplinary problems spanning chemistry, physics, materials science, and biology. Research interests include Plasmonics, Plasmon Enhanced Photovoltaics, Electrical Energy Storage, Biophysical Simulation, and Low Dimensional Nanomaterials.

- My personal research pertained to biological membranes and cancerous proteins such as beta catenin function and how they react to various environments.

- Implemented .NET framework as well as ASP.NET MVC and MVV pattern in order to cross reference database information within the research labs.
- Accessed database information through SQL and Microsoft Transact SQL practices.
- Applied a client-side aspect to my project through HTML, WPF, CSS, Jquery and Bootstrap framework that allowed inputting various properties of a simulated beta-catenin protein in my research study such as temperature, defects, and size of the cancerous protein on a biological membrane.

Technical Environment: C#.NET, .NET Core, Windows Presentation Foundation, Microsoft Visual Studio, Model-View-ViewModel Pattern, HTML, CSS, Javascript, JQuery, AngularJs, Bootstrap, Microsoft Transact SQL

#### **Dr. Singer Ophthalmology Research**

**12/2016- 05/2017**

#### **Research Assistant**

*Research Group looked at differing medications that were in clinical trials that may affect patients with reduction of glaucoma, diabetic retinopathy, and more.*

- Cross referenced patient chart information from Microsoft Excel spreadsheets using server-side languages (SQL and .NET framework) to see how patients were being affected by these medications using various factors such as Intra-Ocular Pressure (IOP) and Hazard Ratios (HR) that the patients possessed in order to see the benefits or differing clinical drugs.
- We used percentages and graphical calculations of Eye Opacity Circumference (EOC) to calculate a more normalized understanding of how these medicines may work within a population set using Microsoft Excel practices, .NET Framework, ASP.NET MVC, Javascript, HTML, CSS, NodeJS, Angular and Typescript.

Technical Environment: C#.NET, HTML, CSS, Javascript, Microsoft Visual Studio, Microsoft SQL Server, Microsoft Team System, SQL, Microsoft-Transact SQL

#### **ADDITIONAL EXPERIENCE**

Texas A&M Health Science Center College of Medicine Internship program

05/2014- 06/2014

I spent five weeks spending time at the tamu health science center to learn various courses such as anatomy, shadowing family physicians and urologist, and practice medical simulations.

University of Texas Medical School at Houston Internship Program

05/2015-06/2015

I spent six weeks learning in a medical school setting. I learned courses such as biochemistry and medical ethics. I shadowed a pediatrician regularly. And I also got to practice medical simulations such as suturing and spinal lumbar taps. I got to see a human cadaver as well.

President of African Student Association (ASA)

08/2015-05/2016

ASA is a great group at Baylor University in which we get involved by making Baylor campus aware of different cultures and also by giving back to the community of waco with various volunteering projects.

Powder Puff Football Coach (Breast Cancer Awareness and Fundraising)

11/2016

I was a coach for a powderpuff football charity event that was very fun and eventful. This event raised a large amount of money for those who have breast cancer. We coordinated outfits, plays, and practices for many girls who had no idea about the sport of football and at the end of the day my team won.

Young Millennials of Tomorrow

Current

This is an up and coming volunteering organization that helps many at risk youth in the Houston area to reach a better life. This organization focuses on community outreach, job development, volunteering, and networking. I have volunteered within this organization already with spending time with youth trying to be a role model to them. It is a great and inexpensive way in order to try to give back to the Houston community.