

# Luke Hiura

BACKEND DEVELOPER · SOFTWARE ENGINEER

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*“Be the change that you want to see in the world.”*

## Summary

Currently a Software Engineer at a stealth startup, focusing on innovative software development in a dynamic, technology-driven environment. With a diverse background in chemical and hardware engineering, I excel in roles that require both technical and analytical skills. Actively pursuing a Master's degree in Computer Science at Georgia Institute of Technology, specializing in Machine Learning, and constantly expanding my skillset in software development, data science, and AI.

## Work Experience

### Sequelae

Santa Clara, CA/USA

SOFTWARE ENGINEER (BACKEND)

May 2022 - Present

- Designed and implemented an advanced healthcare analytics platform using FastAPI, integrating with Google Cloud services for real-time data processing and insights generation.
- Leveraged pandas for data analysis and matplotlib for visualization, enabling the communication of personalized health insights derived from biometric data to users.
- Developed robust back-end services and ETL pipelines for OAuth validation and API requests, enhancing system security and data integrity.
- Integrated the platform with Fitbit, Garmin, AppleHealthKit, and Dexcom for CGM/Sleep/HR monitoring, providing comprehensive health insights to users.
- Implemented Data-Driven Design for visualizing health insights, improving user engagement through interactive infographic applications.
- Engineered Backstage.io as the code foundation to facilitate rapid iteration and reuse of LLM toolkit features by development teams.
- Focused on improving system availability, performance, and customer experience monitoring; implemented automated localization for global reach.

### Woven by Toyota (Formerly Lyft Subsidiary)

Santa Clara, CA/USA

QUALITY ASSURANCE ENGINEER

Oct 2021 - Apr 2022

- Developing, debugging, and troubleshooting test scripts in Python and Bash for stress testing compute and storage module performance in vehicles, including on the AGX Xavier platform.
- Identified and validated defects through comprehensive testing of serial communication protocols (TCP/IP, CAN, UART) using real-world scenarios, test cases, and data analysis.
- Conducted performance testing and analysis using Buildkite and Mode Analytics to assess system performance, scalability, and stability, and provided recommendations for optimization and improvements.
- Developed test scripts for GNSS antennas to evaluate functionality and performance before vehicle installation.
- Designed reliability testing for CAN (Controller Area Network) forwarding services to validate signal integrity, directionality, and message sequencing using accelerated life testing techniques.
- Implemented openHTF to optimize hardware reliability in a fleet of vehicles, resulting in enhanced fleet performance and customer satisfaction.

### Velox Biosystems

Irvine, CA/USA

BIOMEDICAL ENGINEERING INTERN

May 2019 - Dec 2019

- Engaged in Development of lab-on-chips for analysis of urinary tract infections, bloodstream infection, cancer liquid biopsy, and antibiotic susceptibility testing using a comprehensive droplet digital detection system.
- Optimized the detection of amplification through methods of qPCR and ddPCR, and specified targets using fluorescence chemistry and a 3D particle counter to enhance diagnostics' speed and accuracy.
- Contributed to the development of automated systems for efficient and accurate diagnostic testing.
- Applied Lean Six Sigma methodologies for process optimization and quality improvement in laboratory settings.
- Developed proficiency in R programming language for data analysis and experiment automation.

## Certificates

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|------|---|--------------|
| 2023 | <b>AWS Certified Advanced Networking - Specialty</b> , Amazon Web Services (AWS)    |              |
| 2022 | <b>AWS Certified Security - Specialty</b> , Amazon Web Services (AWS)               |              |
| 2022 | <b>AWS Certified Solutions Architect – Professional</b> , Amazon Web Services (AWS) |              |
| 2021 | <b>R Programming</b> , Johns Hopkins University, Coursera                           | CZA8UVP4P43  |
| 2021 | <b>The Data Scientist's Toolbox</b> , Johns Hopkins University, Coursera            | 8TPNQJZQUY5C |
| 2020 | <b>Lean Six Sigma Green Belt</b> , American Society for Quality (ASQ) MENA          |              |

Education

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|---|---------------------|
| <b>(University of California Riverside)</b> | Riverside, CA       |
| B.S. IN CHEMICAL ENGINEERING                | Sep. 2017 - 2019    |
| <b>(Georgia Institute of Technology)</b>    | Atlanta, GA         |
| M.S. IN COMPUTER SCIENCE                    | Sep. 2023 - Current |