

Jean Baptiste Kwizera

210 N Alma School Rd, Mesa, AZ 85201, United States of America

+1 (623) 273-7727

✉ jeanbaptistekwi@gmail.com

in [jbkwizera](#)

🌐 [jbkwizera](#)

Education

Carnegie Mellon University
M.S., Information Technology
University of Redlands
B.A., Computer Science

Pittsburgh, PA
May 2024
Redlands, CA
May 2020

Experience

Amazon.com, Inc.

Seattle, WA

Software Development Engineer Intern

May 2023 - Aug 2023

- Responsible for gathering user requirements from stakeholders and designing solutions tailored to their needs
- Designed and built a multi-component indexed data store for robotic workcells operational data that is queried with a SQL-based Athena engine for observability purposes
- Built a plugin software component for debugging and root-cause analyzing critical robotic workcells failures and system faults. Combined with the database just mentioned, this plugin replaced a pre-existing tool and improved load time from over 30 seconds to below 5 seconds (6x speed improvement)

Vanguard Economics Ltd

Kigali, Rwanda

Research Data Analyst Fellow

May 2022 - Oct 2022

- Delivered a quantitative research survey questionnaires used to collect over 15,000 data points from primary sources
- Performed initial data clean up with STATA and further exploratory data analysis with R to generate and confirm hypotheses responding to business problems
- Shipped an extension of R **ggplot2** package for automated plotting of thematic data visualization graphics
- Produced visualizations with customized graphic themes to tell stories of complex, multi-dimensional data sets

Carnegie Mellon University

Pittsburgh, PA

Graduate Teaching Assistant

Sept 2021 - Dec 2021

- Led class discussions with over 10 graduate students on cognitive systems topics from fields such as cognitive science, artificial intelligence, machine learning, and robotics, among other fields

Ministry of Infrastructure

Kigali, Rwanda

Software/Machine Learning Engineer Intern

May 2021 - Sept 2021

- Developed a solution for real-time road-damage detection from images captured by a smartphone camera using convolutional neural networks and computer vision techniques
- Built and shipped a data visualization web dashboard, and an android camera app for data capture and relay
- Built a backend server with RESTful API and a cloud MongoDB database integrated with an android camera app

TechnologiesX

New York, NY

Cybersecurity Analyst

June 2020 - Oct 2020

- Oversaw purchase and configuration of the company's site SSL certificate and migration to Azure
- Maintained company's Azure cloud Windows and Ubuntu virtual machines, data servers, and network equipment
- Insured security and reliability of internal communication infrastructure and protocols
- Wrote Python & Bash scripts for regular security diagnostics on company-wide IT systems

Projects

- **Linux shell:** An interactive command line interface, with piping (inter-process communication) and I/O redirection capabilities, running commands as complex as an industry-grade shell like Bash can run [\[link\]](#).
Tools/skills: C, Unix processes, fork/exec, I/O handling, GNU Debugger (**gdb**), Git/Github
- **Automated road management system:** An integration of a camera mobile app, a neural network model, and a visualization web dashboard to enable automated monitoring of road damages [\[link 1\]](#)[\[link 2\]](#).
Tools/skills: Java, Kotlin, Python, Angular, TypeScript, JavaScript, Chart.js, Node.js, Express, MongoDB, RESTful APIs, Convolutional neural networks, OOP, Git/GitHub, CI/CD
- **Data visualization:** R **ggplot2** package extension for quick & thematically consistent visualization [\[link\]](#).
Tools/skills: R (tidyverse), OOP, Git/GitHub, CI/CD

Technical Skills

Programming Languages: Java, Python, C/C++, R, STATA, MySQL/SQL, TypeScript, JavaScript, HTML5, CSS3
Frameworks & Design/Tech Tools: AWS, MongoDB, Express, Angular, Flask, Figma, Git/GitHub, \LaTeX