

# Burmau Garba

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## Technical Skills

**Programming Languages/Frameworks:** Java, Spring MVC, Python, C/C++. Angular

**Database:** MySQL, PostgreSQL

**Others:** Docker, Cucumber4J, JUnit, Version Control, TDD, BDD, CSS

## Employment/Research

Northern Kentucky University, Research Software Engineer, December 2023 – Present.

- Collecting and cleaning planetary motion data from International Space Station (ISS).
- Develop algorithms that can recover planetary paths with little know information retrieved from the dataset.

## Constellation Insurance

Software Engineer Co-op, May 2022 – January 2024.

- Assisted in the creation and containerization of microservices using Spring Boot and Docker which enabled service resilience and availability to over 200,000 policy holders across North and South America.
- Perform frequent debugging of Web application using IntelliJ IDEA in search of bottlenecks.
- Perform biweekly code review with teammates to identify technical debt in company services.
- Implemented URL versioning and service discovery for microservices using Spring and Netflix Eureka.
- Programmed RESTful endpoints for microservice using Spring Boot.
- Developed Java programs integrated with Maven to optimize and streamline data transfer processes, and successfully migrating data for over 5,000 Value Quotes policy holder into a PostgreSQL database repository.
- Created scripts that extract data from excel workbooks and migrates them into a PostgreSQL database using Python.
- Created validation suites to ensure over 20,000+ insured member data is transferred securely to cloud storage database.
- Collaborated with the domain experts in designing comprehensive Behavior Driven Tests for both developers and domain experts with Cucumber4J.

## Projects

Full Stack Student Web RESTful API App | [GitHub.com/burmaug/student-fullstack](https://github.com/burmaug/student-fullstack) | September 2023

- Created a student application that displays student information with ReactJS and CSS.
- Designed database schema for the persistence of inventory data using MySQL/H2 database.
- Developed RESTful endpoints for use in executing CRUD methodologies with Spring MVC and Java.
- Used React framework for the frontend so that clients can send, update and review data from the server.

Car Price Prediction ML | [GitHub.com/burmaug/CarPricePrediction](https://github.com/burmaug/CarPricePrediction) | October 2023

- Implemented linear regression algorithm with the use of Numpy to aid with weight calculations in the matrix features.
- Used Seaborn and Matplotlib for target value analysis and depicting skewness in data.
- Performed feature engineering to optimize price prediction accuracy.
- Implemented RMSE and Regularization to help describe the confidence of the model's predictions as opposed to plotting them each time and to prevent *numerical instability*.
- Implemented One-hot Encoding to transform features that would otherwise be categorical into regression features.
- Accomplished seventy – eighty percent price to target accuracy predictions.

## Volunteer

ASP.NET Core Software development mentor at Code:You, October 2023 – Present.

## Education

BSc Computer Science – Northern Kentucky University 2023.