

# SEAN PRINCE TINASHE HUVAYA

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## Summary

I am a mid-level software engineer who possesses robust backend development experience and has advanced studies in artificial intelligence. I have successfully built high-performance applications and scalable integrations, including an NPM package for payment gateways. I am currently pursuing a master's degree in AI, and with my strong proficiency in Python, R, and AI frameworks, I am well-positioned to make significant contributions to innovative AI projects.

## Skills

- **Programming Languages:** Python, R, Java, SQL
- **Machine Learning & Data Science Tools:** PyTorch, Scikit-learn, Pandas, Numpy, Matplotlib, Machine Learning, Computer Vision
- **Data Management:** PostgreSQL, MySQL
- **Other Technical Skills:** GitHub, Docker, AWS, RESTful APIs

## Work Experience

### Yeshiva University | *Supplementary Instructor - Introduction to Data Science*

Aug 2024 - Present

- Tutored students in R programming for statistical modeling, data manipulation, and data science applications, reinforcing practical machine learning techniques
- Assisted students with key data science and ML concepts, including clustering, logistic regression, linear regression, and exploratory data analysis
- Guided students in applying machine learning methods to real-world datasets, strengthening analytical and research skills

### CGA Technologies | *Software Engineer*

Oct 2022 - Aug 2023

- Enhanced MySQL database efficiency, reducing API latency by over 10% for data-driven operations
- Developed and implemented two custom Vue.js UI components, streamlining code reusability and improving testing efficiency across the platform
- Engineered more than 10 feature improvements for the Social Cash Transfer Programme, utilizing Java to deliver robust application enhancements

### CodeVirtus | *Backend Developer*

Jun 2021 - Nov 2022

- Designed an NPM package to facilitate integration with PesePay payment gateway, achieving 40+ weekly downloads and expanding system interoperability
- Contributed to a seven-member agile team, customizing open-source projects and collaborating to align solution with client requirements
- Developed an image bank feature, enabling real-time image resizing with Java and SpringBoot, optimizing performance

### Invenico | *Software Engineer*

Apr 2019 - May 2021

- Spearheaded client-focused system improvements, conducting needs assessments and implementing technological enhancements to support organizational processes
- Refactored legacy code to attain 72% test coverage, reducing bugs and enhancing system reliability
- Delivered successful technical solutions for three major projects, leveraging expertise in Java to optimize functionality for end users

### Invenico | *Android Developer*

Jun 2018 - Mar 2019

- Created a POS Android application to manage meal purchases, now actively used by 20+ employees at MIMOSA
- Developed MITAS POS Android application, which has since been adopted by four organizations to support secure transactions with tap card functionality
- Enhanced the BUS POS application for ZUPCO by integrating receipt printing capabilities, expanding the app's versatility for public transport use cases

## Education

### Yeshiva University

Expected Dec 2025

*Master of Science, Artificial Intelligence*

### University of Zimbabwe

Aug 2017 – Dec 2022

*Bachelor of Business Studies and Computing Science*

## Projects

### Deep Learning-Based Canine Cardiomegaly Detection | [Research Paper](#)

Apr 2025

*Yeshiva University — Computer Vision Mini Research Project*

- Designed and trained a ResNet-101-based CNN to detect six key anatomical points in canine thoracic X-rays for automated Vertebral Heart Size (VHS) estimation.
- Achieved a mean absolute error (MAE) of 0.798 and MAPE of 8.64% on a real-world dataset of 2,000 dog radiographs.
- Developed a custom PyTorch pipeline with data augmentation, keypoint regression, and real-time inference capabilities.