Eliot Dixon

Data Analyst and Software Engineer

eliot.dixon@kdv-decisions.com

> *Data Analyst and Software Engineer with more than six years of experience applying R, Java, and Python to data visualization, web application development, and automated reporting. Skilled in scoping and managing database and software development projects, spatial data analysis, and mentoring junior developers at KDV Decision Analysis LLC.*

PROFESSIONAL EXPERIENCE

KDV Decision Analysis LLC, Cary, NC

Data Analyst and Software Engineer, III (October 2025 – Present)

- Scope and manage database and software development projects
- Train new employees and review junior developer's code
- Participate in strategic planning of company data infrastructure

Data Analyst and Software Engineer, II (October 2023 – October 2025)

- Apply advanced R data analytic and software skills to develop data visualizations, web apps, and automated reports
- Represent KDV in client meetings and at professional events
- Assist with development of project scope and budget estimates

Data Analyst and Software Engineer, I (February 2019 – October 2023)

- Assist with development of automated reports and web applications
- Data wrangling with R base and tidyverse methods
- Spatial data manipulation and geoprocessing in R
- Designed and built a time tracking and project management tool with MongoDB backend and R Shiny frontend

StreamLine (Self Employed)

Java and SQLite Mobile Application Developer (September 2019 – December 2022)

- Developed a mobile application in Java for the rapid calculation of Hilsenhoff biotic index to be used in the field by biologists or aquatic entomologists
- Worked alongside aquatic entomologists to provide assistance and receive expert feedback on application feature development

University of North Carolina – Asheville

Undergraduate Data Science and Programming Teaching Assistant (May 2017 – August 2017)

Department of Computer Science, Prof. Kevin Sanft

- Assisted in the production and organization of course material for a data science course and an introductory programming course covering Python and R

Python Software Developer and Researcher (September 2017 – September 2018)

Department of Computer Science

- Worked alongside a team of students and faculty to develop a Python package designed to provide methods for obtaining statistically correct trajectories for biochemical ordinary differential equations

Java Artificial Intelligence Developer, Othello Tournament (Self Employed, competition) (September – December 2017)

- Developed an AI system in Java which took first place in an Othello tournament between twenty other competing systems
- Implemented an alpha-beta pruning algorithm to determine moves

EDUCATION

Bachelor of Science, Computer Science — University of North Carolina at Asheville, December 2018

Graduated Cum Laude

Course Highlights: Data Science, Software Engineering, Parallel Programming, Artificial Intelligence, Introduction to Databases, Data Structures, Biology I, Biology II, Botany I, Statistics, Discrete Math

Programming Languages: R, Java, SQL, C, Python

Operating Systems: MacOS, Windows, Ubuntu

CONTINUING EDUCATION

- The Fundamentals of OCAP, First Nation Information and Governance Centre, 2025
- 'R You Out of Memory' Day Course on Arrow and DuckDB in R, UseR Conference, 2025
- Intermediate PostgreSQL, University of Michigan Through Coursera, 2024
- Database Design and Basic SQL in PostgreSQL, University of Michigan Through Coursera, 2024
- Shiny in Production, Posit Conference, 2023
- Web Design for Shiny Developers, Posit Conference, 2023
- Evaluating and Validating Species Distribution Models with R, Transmitting Science, 2022
- Core Spatial Data Analysis: Introductory GIS with R and QGIS, Udemy, 2020
- Intermediate Spatial Data Analysis with R, QGIS & More, Udemy, 2020
- Species Distribution Models with GIS & Machine Learning in R, Udemy, 2020