

# GUHA MAHESH

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[github.com/guha-mahesh](https://github.com/guha-mahesh) | [linkedin.com/in/guhamahesh/](https://linkedin.com/in/guhamahesh/) | Available: January - August 2026

## EDUCATION

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| <b>Northeastern University</b> , Boston, MA, GPA: 3.8/4.0  | May 2028 |
| <i>Bachelor of Science in Data Science and Business Analytics with a focus in FinTech</i>  |          |
| <b>Activities:</b> John Martinson Honors Program, Dialogue of Civilizations in Belgium   |          |
| <b>Relevant Coursework:</b> Programming with Data 1 & 2, Foundations of Data Science, Discrete Structures, Business Statistics, Financial Management, Financial Accounting, Introduction to Databases, Fintech and Financial Innovation, Marketing and Society |          |

## TECHNICAL SKILLS

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| <b>Languages:</b>   | Python, TypeScript, JavaScript, SQL |
| <b>Tools/Libraries:</b> pandas, NumPy, Matplotlib, Scikit-learn, Jupyter, Keras, Docker, React, Flask, Express.js, PyTorch, Torchvision, AWS S3, MySQL, PostgreSQL, Next.js |                                     |

## PROJECT EXPERIENCE

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| <i>Deep Learning Engineer, BioClock, Tech Stack: PyTorch, Google Earth Engine, Torchvision</i> | September 2025 – October 2025 |
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- Engineered a convolutional neural network with the aim of predicting biodiversity based off satellite images
- Utilized Google Earth Engine to collect 7,000+ satellite images and integrated biodiversity records from the GBIF API to build a labeled training dataset
- Augmented the satellite images with Torchvision to prevent overfitting, improving model generalization and achieving a final accuracy of 80%

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| <i>Developer, FlightScope, Tech Stack: Python, Flask, React, Scikit-learn, pandas</i> | August 2025 – September 2025 |
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- Built a full-stack web application that recommends optimal birdwatching conditions, enhancing user experience for birding enthusiasts
- Engineered a data pipeline to process 196 GB of birding and weather data, including cleaning, transforming, and integrating multiple sources to prepare inputs for predictive modeling.
- Designed and deployed 30 Poisson distribution models to predict probabilities of spotting specific bird species based on weather and time variables

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| <i>Data Analyst, Policy Playground, Tech Stack: Python, Flask, MySQL, pandas, Scikit-learn</i> | May 2025 – June 2025 |
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- Developed multiple linear regression models to forecast S&P 500 performance and major currency exchange rates using normalized fiscal/monetary policy indicators and lagged historical data
- Designed a policy recommender system that improved content discoverability and user engagement; containerized the application with Docker to streamline deployment and eliminate environmental inconsistencies

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| <i>Full-Stack Developer, ClubStop, Tech Stack: React, TypeScript, MySQL, Express.js, Node.js, AWS S3</i> | February 2025 – August 2025 |
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- Developed a full-stack platform enabling university students to discover, rate, and promote clubs and organizations
- Designed and implemented a RESTful API with 20+ endpoints to support robust club management features and dynamic user interactions. Integrated secure JWT authentication with token refresh and role-based access controls, ensuring data integrity and user privacy protection

## WORK EXPERIENCE

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| <i>Facilitator, Rev (NU Student Club), Boston, MA</i> | August 2025 – Present |
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- Produced engaging social media videos that increased visibility and attendance at club information sessions
- Reviewed 30+ membership applications and identified top candidates for interviews
- Led candidate evaluations and interviews, selecting members best positioned to contribute to Rev's mission and impact

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| <i>Data Science Tutor, Knack, Boston, MA</i> | January 2025 - Present |
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- Achieved a 5-star rating by guiding 10 students to improve their academic performance and strengthen Python programming
- Delivered personalized instruction in Pandas, NumPy, statistics, and Exploratory Data Analysis (EDA), enabling students to apply data science concepts in coursework and projects

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| <i>Data Science Intern, Green Joules, Remote</i> | June 2023 – September 2023 |
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- Assessed biofuel feasibility of 11 crops by analyzing production volumes, commodity prices, and food security considerations
- Researched crop by-products for potential biofuel applications and presented data-driven recommendations
- Developed visualizations that informed strategic decision-making on the potential establishment of a biorefinery in Texas