# **NEVILLE JOSEPH ROY**

Boston, MA roy.ne@northeastern.edu | LinkedIn | (857)-799-0827

#### **EDUCATION:**

M.S in Engineering Management: GPA: 3.6

2022-present

Northeastern University, Boston, MA

Relevant Courses: Probability & Statistics, Computational and Visualization Analytics, Data Management and

Database Design, Engineering Project Management, Economic Decision Making

**B.E in Computer Science and Engineering:** 

2018-2022

Ramaiah Institute of Technology, Bangalore

#### **TECHNICAL SKILLS:**

Programming Languages: Python 3, Java, C, HTML, SQL, R Studio

Software and Frameworks: Microsoft Excel, Microsoft Power BI, Microsoft Powerpoint, Tableau, Salesforce

### **ACADEMIC PROJECTS:**

Dataset Generation by Image Classification, Ramaiah Institute of Technology | Team Lead Oct. 2021 - Nov. 2021

- Developed a dataset generation model using mobilenet CNN architecture to compare similarity scores of images to select relevant images using metrics such as cosine similarity.
- Increased dataset generation efficiency as compared to traditional CNN models by reducing the number of parameters used to compare image similarity scores against a specified threshold value

Optimization of Meta-Heuristics Algorithm, Ramaiah Institute of Technology | Team Lead Jan. 2021 - Jul. 2021

- Conducted a detailed survey on over 10 nature-inspired algorithms and implemented them using Python 3 in a team of three.
- Analyzed and improved the Whale Optimization Algorithm (WOA), a nature-inspired meta-heuristics algorithm, by finding optimal hyper-parameter values using Grid Search Algorithm.
- Tested the optimized algorithm against five objective functions. The proposed approach was observed to outperform the original approach by at least 7%.

### INTERNSHIPS AND WORK EXPERIENCE:

## Business Analyst Intern, Ernst & Young Private Limited, India

Apr.2022 - Jul.2022

- Utilized predictive modeling concepts such as linear and logistic regression to analyze trends and client financials resulting in a 15% increase in revenue projections for the upcoming fiscal year.
- Created dashboards using visualization tools like Power BI to project trends and consult strategy with management.
- Collaborated with data science and data engineering teams to utilize statistical techniques and software to implement analytical models such as a churn prediction model to identify correlations.

### Head - Product Management Team, General Intelligence, India

Dec. 2020 - Aug. 2021

- Led product management and development team consisting of 8 members at General Intelligence, a research lab focused on self-driving technology and autonomous mobile robots.
- Utilized Salesforce CRM to implement a system to track team members' strengths and skills, thereby assigning tasks more effectively to boost team productivity and project efficiency.
- Conducted market research to analyze the relevance of a new product in the Last-Mile Delivery Robots' market and developed optimal pricing structure and strategy, predicting a 20% increase in revenue growth.

## Business Analyst Intern, COSMICTECH Infosystems Private Limited, India

Nov. 2020 - Jan. 2021

- Conducted comprehensive breakdown analysis of the company's revenue growth over the last three fiscal
  years, utilizing Microsoft Excel and SQL.
- Studied operations management of the Device as a Service(DaaS) offering of CosmicTech, worked on and suggested changes and strategies to achieve better growth in profit by 25%.

**RESEARCH PUBLICATION:** Improved Whale Optimization Algorithm for Clustering, Anita Kanavalli, Pradeep D, Sowmya B. J, **Neville Roy**, Poorvi Goyal and Karthik S.L. (Accepted at the 2021 IEEE 2nd International Conference on Technology, Engineering, Management for Societal Impact using Marketing, Entrepreneurship and Talent.