

Ritika Sharma

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Stamp 4

Personal Summary:

NLP Engineer, having 6+ years of industrial experience with expertise in building and deploying production-ready AI solutions, following best software engineering practices. I specialize in multimodal AI, integrating text, speech, and vision for real-world applications such as facial expression analysis and sentiment analysis. At Scorebuddy, I led the development of AI-driven SaaS applications, enhancing rule generation, topic classification, and conversational analysis. I have experience in designing scalable ML/NLP pipelines, optimizing speech-to-text models, and deploying cloud-based microservices. With an MSc in Intelligent Systems (Trinity College Dublin), I thrive in research-driven environments, driving AI innovations through model optimization and evaluation frameworks.

Technical Skills:

- **NLP/ML:** NLTK, Spacy, PyTorch, scikit-learn, OpenCV, PyFeat
- **Programming:** Python (Flask, Django, FastAPI), JavaScript (AngularJS, React, Node.js, Next.js)
- **Databases:** MongoDB, PostgreSQL, MySQL, DB2
- **Project Management / General Tools:** AWS (S3, EC2, Lambda), Docker, Microservices, Git, Agile

Professional Experience:

Scorebuddy | Dublin, Ireland

NLP Engineer

Oct 2022 – Current

- Developed and optimized end-to-end ML/NLP pipelines, incorporating text preprocessing, entity recognition, topic classification, rule generation, and sentiment analysis.
- Built AI-driven SaaS application for quality assurance using the MEAN stack (MongoDB, Express, AngularJS, Node.js), analyzing thousands of daily customer-agent interactions, improving customer experience.
- Led PoC development to optimize speech-to-text transcription models, addressing key product challenges in multimodal AI.
- Designed and deployed microservices in Python and Go, integrating customer-support helpdesks (e.g. Zendesk, Salesforce) on AWS (S3, EC2, Docker, Lambda).
- Improved system performance by optimizing MongoDB queries, significantly reducing UI load times.
- Took ownership of the task and implemented best software engineering practices, including JIRA tracking, documentation, developer notes, test-driven development (TDD), and version control.
- Skills – NLTK, Spacy, PyTorch, Flask, Go, MongoDB, AWS (S3, EC2, Lambda), Docker

Infosys | Bangalore, India

Senior Software Engineer

September 2017 – June 2021

- Led the migration of a 50-year-old legacy codebase from PL/I to Python, ensuring scalability and maintainability of a mission-critical fintech platform.
- Optimized mainframe-to-AWS transition, significantly improving performance and system efficiency
- Analyzed customer annuity purchase patterns, providing actionable business insights that optimized financial product offerings to maximize business profit.
- Provided technical guidance and mentorship to junior engineers, fostering their growth and development.
- Skills– Mainframe (SAS, JCL, DB2, and PL/I), Python, Fintech, AWS

Paws and Play | Bangalore, India

CTO, Co-founder

August 2018 – June 2019

- Developed a full-stack application for pet care services ensuring a seamless user experience
- Reached final round of Techstars startup accelerator program out of 1000+ applicants.
- Conducted market research to identify user needs and prepared roadmap for development of the product.
- Skills– Django, PostgreSQL (ORM), React (JavaScript)

Education:

Master of Science – Computer Science – Intelligent Systems

September 2021 – August 2022

Trinity College Dublin

Dublin, Ireland

- Final Grade: Distinction 1:1
- Thesis topic - Predicting Big-5 Personality type from Facial Action Units in a multi-modal dataset
- Focus on Machine Learning, Deep Learning and Artificial Intelligence

BTech Computer Science and Engineering | 1:1

July 2013 – May 2017

Modj University of Science and Technology

India

Awards and Recognitions:

- Recognized by the DDL client and Product Owner for delivering production-ready AI solutions in record time – Scorebuddy
- Appreciated for adding integrations in record time of three days – Scorebuddy
- Recognized as the top performer by the client and appreciated for dedication & commitment - Infosys
- Appreciated for innovation & planning – Infosys

Certifications / Courses:

- Udacity Frontend developer and Full-stack developer nanodegrees
- Microsoft MTA - Introduction to Programming Using Python
- Infosys Global Agile Development certification
- Udacity Go course