

Manju Malateshappa

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PROFILE

- Experienced professional with over **8 years** of expertise in leading **AI-driven NLP solutions**, enhancing insights, managing **MLOps**, designing user interfaces, and addressing high-profile **customer issues**.
- Graduated with a **Master's** in Computer Science, specializing in **Big Data** and **Machine Learning** from **Simon Fraser University**.
- Proficient in developing data pipelines using **Apache Spark**, **MapReduce**, **Python** & **HDFS**.
- Proven ability in **optimizing web functionality** that improve data retrieval and workflow efficiencies.

EXPERIENCE

Alida Inc

Senior Artificial Intelligence Engineer - Full time

Vancouver, Canada

Sep 2022 - Jun 2023

- Led the successful implementation of AI services, including **content parsing**, **PII masking**, and **conjoint analysis**, using **Node.js** and **Python** for comprehensive text analysis and market research.
- Designed and implemented an advanced AI solution for **real-time** and **batch** tasks like sentiment analysis, tagging, taxonomy, masking, and parsing. Leveraged **serverless architecture**, **AWS Lambda**, **Step Functions**, **S3**, and **state machines** for maximum efficiency and scalability.
- Productized AI services using **Docker**, **Terraform**, and **Kubernetes (EKS)**, simplifying deployment and enhancing scalability for seamless service delivery.
- **Architected** a centralized Python AI project **mono-repository** with **poetry**, enhancing project coordination and enabling the seamless development of advanced AI solutions.
- Productized **data pipelines** for Text analysis services, seamlessly managing 15 million records and presenting insights on the text analysis dashboard, thereby securing a prestigious contract.
- Played a key role in building a **nodejs framework** for text analysis services, enabling a **scalable** solution.
- Effectively managed **MLOps** for **13 micro-services**, including **unit**, **performance**, and **smoke testing** and successfully oversaw **production** deployment.

AI/ML Engineer - Full time

May 2021 - Sep 2022

- Designed and implemented a **Text Analysis** Solution for **part-of-speech tagging** and **sentiment analysis**, utilizing **Spacy**, **NLTK**, **AWS Comprehend**, and **AWS Translate**.
- Successfully deployed Alida's Text Analysis Solution, creating **microservices**, with **AWS Lambda**, **Step Functions** and **state machines**. The final deployment was on **AWS EKS**, enhancing **scalability & efficiency**.
- Developed cloud infrastructure for AI services with **Terraform** for **AWS (DMS, RDS, IAM, S3, and SQS)**.
- Designed and implemented a deployment workflow using **GitHub Workflow** & **GoCD** for the **microservices**, configuring, custom **AWS CloudFormation** resources through **Terraform** for streamlined deployment.
- Prototyped ML pipeline for data collection, ETL, measuring performance, and deployment (**NLTK**, **TextBlob**, **spaCy**) with **Apache Airflow** for optimized ML workflows.
- Integrated **Prettier**, **ESLint/TSLint**, **Pytest**, **Pylint** and **mypy** configurations for AI services in both Node.js and Python, resulting in a notable increase in **unit test** coverage and a reduction in bugs within the AI services.

AI/ML Engineer - Internship and Contract

Apr 2020 - May 2021

- Designed microservices for email **open rate prediction(XGBoost)** and **automated document tagging**, Terraformed AWS resources, and deployed them to production via AWS EKS and GoCD.
- Developed **React** app for email open rate predictions integration into the Alida Survey distribution platform, improving customer satisfaction and reducing churn.
- Architected and deployed end-to-end data pipelines for tagging and open rate prediction services, utilizing **Kubeflow** to streamline ML workflows.
- Researched Sawtooth Software, Qualtrics for conjoint analysis and designed custom solution for Alida clients.
- Designed and deployed a **text analysis** microservice with **IBM NLU** on **AWS EKS**, optimizing scalability to handle four times more data and improving user satisfaction.

Nagra Kudelski
Software Engineer(UI Developer) - Full time

Bangalore, India
Jun 2017 - Aug 2019

- Key contributor at FOXTEL TV Australia, leading the development of core features, including the **boot-up menu, content protection, Cloud DVR, parental lock, content blackout**, and **Google Analytics-based content recommendations**.
- Effectively managed 3 challenging projects (CHIVAS TV, Euskatel TV, TBC Taiwan) while handling **requirements, project planning** , and ensuring **timely deliverables**.
- Designed and developed highly scalable and maintainable embedded applications using **HTML, CSS, SASS** and **JavaScript**, optimizing performance for low-end platforms.
- Implemented **Jasmine and Selenium automation** to enhance feature quality and prevent regressions.
- Planned delivery of work and demonstrated active leadership within the team and agile practices. **Conducted design & code reviews**, sign off code for push to production.

Software Engineer (Embedded UI developer) - Full time

Jan 2014 - May 2017

- Served as the primary contributor in **embedded UI** development projects for prominent Latin American clients, namely NET TV and Claro TV, headquartered in Brazil.
- Provided effective solutions for various **performance issues**, in boot-up, screen navigation, and UI rendering.
- Strong expertise in developing features such as **content protection** through CRM, **Picture-in-Picture (PIP)**, **parental control, recommendation systems, search** functionality, **CloudDVR & IP channel** integration.
- Supported successful live deployment of **IP Channels**, Net TV, and Claro TV **4K content** during the **2016 Rio Olympics**, resolving customer issues in **Brazil** (Nagra - Sao Paulo and Embratel - Campinas offices). Achieved seamless deployment for **2M customers**, securing a 2-year contract extension with Nagra Kudelski Group.
- Participated in various **agile ceremonies** including user story grooming, sprint planning, demos, and retrospectives.

EDUCATION

- **Simon Fraser University** Burnaby, Canada
Master of Science in Computer Science (Big Data and Machine Learning) *Aug 2019 - May 2021*
- **University Visvesvaraya College of Engineering** Bangalore, India
Bachelor of Science in Computer Science *Aug 2009 - Jun 2013*

PROGRAMMING SKILLS

- **Languages:** Python, Javascript, Typescript.
- **Web Technologies/Frameworks:** ReactJS, Nodejs, D3.js, Django.
- **Machine Learning Frameworks::** Scikit-learn, PyTorch, MLFlow.
- **Natural Language Processing::** IBM-NLU, AWS Comprehend, LLM's(GPT-3.5, GPT-4).
- **Cloud Technologies:** Docker, AWS, Kubernetes, openshift, terraform.
- **Big-data Technologies::** Apache spark, MapReduce, Kafka, HDFS.
- **Databases::** SQL (MySQL), NoSQL (Cassandra & MongoDB).

DEVELOPMENT SKILLS

- **Package Management:** Poetry.
- **Workflow Orchestration:** Apache Airflow, Kubeflow.
- **Version Control & CI/CD:** GitHub, GitHub Actions, GoCD.

HACKATHON EXPERIENCE

Alida Hackathon (17-18 March 2023) - Winner

- Crafted an integrated solution using **Jira,Slack,Git diff** and **LLM's** to automate PR generation on GitHub.
- Deployed the solution using **GitHub Actions** and demonstrated the effectiveness of LLMs in **code reviews**.

Alida Hackathon (17-18 Mar 2022) - Winner

- Designed a **classification** solution powered by **XGBoost** for precise detection of speedy survey respondents, expertly deployed within **AWS SageMaker**.
- Integrated the **classification** solution into Alida platform, enhancing survey insights by identifying speedsters.