NIDARSH NITHYANANDA

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SUMMARY

Software Engineer with 4+ years of experience in full-stack development, microservices, and AI/ML. Skilled in Python, Java, CI/CD, and cloud infrastructure. Proven ability to optimize systems, automate processes for improved performance and collaborate with cross-functional teams. Eager to contribute my technical experience to drive innovation and support the company's vision, while continuously growing in the AI and tech space.

SKILLS

 $Python \mid Java \mid C++\mid SQL \mid Javascript \mid Numpy \mid Pandas \mid Scikit-Learn \mid Keras \mid Tensorflow \mid Pytorch \mid Matplotlib \mid Tableau \mid PowerBI \mid Jira \mid Generative AI (GenAI) \mid Large Language Modelling (LLM) \mid Computer Vision \mid Natural Language Processing (NLP) \mid HTML \mid CSS \mid Tailwind CSS \mid Node JS \mid Spring Boot \mid React \mid Next.js \mid Flask \mid FastAPI \mid MongoDB \mid MySQL \mid Oracle 11g \mid PostgreSQL \mid AWS (IAM \mid EC2 \mid Lambda \mid RDS \mid SES \mid SNS) \mid Docker \mid Jenkins \mid Git \mid Communication \mid Teamwork \mid Problem-solving \mid Adaptability \mid Time Management \mid Attention to Detail \mid Collaboration \mid Creativity \mid Leadership$

EXPERIENCE

Thaniya Technologies Software Engineer - AI/ML (Freelance)

Mangaluru, India Jul 2022 – Present

- Developed AI-powered applications, including a computer vision-based disease detection system, improving crop health monitoring by 20%.
- \bullet Engineered a Python-based RPG game, achieving a textbf95% customer satisfaction rate.
- \bullet Enhanced development efficiency by 15% using a gile methodologies and robust DevOps pipelines.

Tech Mahindra Software Engineer Pune, India

- Dec 2021 Jun 2022
- Designed and implemented microservices and scalable APIs, reducing security vulnerabilities by 30%.
- Coordinated the Kubernetes migration, optimizing continuous integration and deployment (CI/CD).
- Developed key components of an **online ordering system**, reducing **checkout time by 10%**.

IBM
Application Programmer (Java Full Stack)

Bengaluru, India

Aug 2019 - Dec 2020

- Developed **Spring Boot microservices** and **React-based front-end components**, enhancing system response time by **20**%.
- Automated log fetching and root cause analysis using Python, saving 35 hours of manual work weekly.
- Improved Agile development and CI/CD practices, reducing time-to-market for new features by 10%.

Sahyadri College of Engineering & Management Research Assistant

Mangaluru, India

Aug 2018 – May 2019

- Researched EEG signal classification, achieving 92% accuracy in detecting alcoholism using AI models.
- Developed data preprocessing scripts, reducing manual effort by 70%.
- Published research findings in **Springer Singapore (AISC, Volume 1133)** and presented at AIDE-19 Conference.

EDUCATION

University of Alabama at Birmingham

Birmingham, Alabama

Master of Science, Computer Science

GPA 3.7

Relevant Coursework: Machine Learning, Natural Language Processing, Advance Algorithms, Database Systems, Advance Object Oriented Programming with C++, Matrix Algorithms for Data Science, Deep Learning, Cloud Computing

Sahyadri College of Engineering and Management

Mangaluru, India

Bachelor of Engineering, Computer Science and Engineering

GPA 7.32

Relevant Coursework: Data Structures and Applications, Software Engineering, Design and Analysis of Algorithms, Database Management Systems, Artificial Intelligence, Computer Graphics and Visualization, Unix and Shell Programming, Big Data Analytics

Activities: Mentored budding developers during Hactober Fest 2018 and Cognit'19 2019 Hackathons conducted at Sahyadri College of Engineering and Management, Mangaluru.

PUBLICATIONS

Exploring the Performance of EEG Signal Classifiers for Alcoholism

Aug 2020

Advances in Artificial Intelligence and Data Engineering, Advances in Intelligent Systems and Computing, vol 1133. Springer, Singapore. https://doi.org/10.1007/978-981-15-3514-7 12

CERTIFICATES

Generative AI Fundamentals, Google Cloud Skills Boost, GoogleJun 2023AWS Certified Cloud Practitioner, AWS, AmazonMay 2023 - May 2026Deep Learning Specialization, DeepLearning.ai and CourseraApr 2020Advanced Data Science with IBM, IBM and CourseraSep 2019

PROJECTS

Local RAG for PDFs using Ollama

Feb 2025

Tech Stack: Python, Ollama, ChromaDB, uv

Github Repo: https://github.com/NidarshN/local rag ollama

A command-line tool that enhances PDF interaction by leveraging local AI-powered responses and efficient document search.

- Developed an AI-powered CLI tool to index PDFs for quick and context-aware document interaction.
- Implemented local retrieval-augmented generation (RAG) using ChromaDB for fast and efficient document searches.
- Utilized uv for **efficient dependency management** and easier project setup.

SimplyShare - Cloud based file sharing

Aug 2024

Tech Stack: Python, Flask, HTML, CSS, Javascript, AWS (EC2, Lambda, SES, RDS) Github Repo: https://github.com/NidarshN/simplyShare

Engineered a user-friendly interface that allows users of all technical levels to effortlessly upload, download, and share files with customizable access controls.

- Implemented scalable storage solutions using AWS S3 and AWS RDS, enabling flexible storage options that adapt to the needs of solo users and large enterprises.
- Integrated AWS SES for secure email notifications, ensuring real-time updates for shared files and collaborative activities.
- Deployed the application on AWS EC2, ensuring high availability and robust performance across various devices.

Extractive and Abstractive Summarization on BBC News Corpus

Aug 2022

 $Tech\ Stack:$ Python, Pytorch, NLTK, Transformers, Lightning AI, Git, Hugging Face $Github\ Repo:$ https://github.com/NidarshN/text-summarization-extractive-abstractive

A study on the performance of extractive, abstractive, and ensemble summarization techniques on the BBC News Corpus.

- Conducted **comprehensive exploratory data analysis (EDA)** on the BBC News Corpus, identifying key patterns and trends that informed subsequent **feature engineering decisions**.
- Implemented an **ensemble pipeline** for the execution flow, increasing the overall efficiency of the machine learning process by 10%.
- Evaluated performance of T5, PageRank, and BERT-based models after retraining on the BBC News Corpus.

Exploring the Performance of EEG Signal Classifiers for Alcoholism

May 2019

Tech Stack: Python, Scikit-learn, Numpy, Pandas, Flask, Git Github Repo: https://github.com/NidarshN/EEG_Classifiers

A machine learning project evaluating EEG signals to classify alcoholic and non-alcoholic subjects.

- Developed **Python scripts** to efficiently structurize large EEG datasets and performed data preprocessing using techniques such as **normalization**, **noise reduction**, and **feature scaling**, ensuring **optimal data quality**.
- Implemented supervised learning classifiers including Support Vector Machine, K-Nearest Neighbors, Naive Bayes, and Artificial Neural Networks to optimize predictive performance.
- Achieved 60% improvement in classification accuracy using feature engineering and model tuning.