Nidarsh Nithyananda

nidarsh.nithyananda.1@gmail.com · +918494914899 · github.com/NidarshN · linkedin.com/in/nidarsh-n/

Summary

Experienced software engineer with expertise in full-stack development, machine learning, and deep learning. Delivering innovative solutions, enhancing efficiency, and contributing to impactful research, coupled with a strong commitment to volunteering and community engagement.

Skills

Programming Languages:	Python, Java, C++, SQL, Javascript
Machine Learning:	Numpy, Pandas, Scikit-Learn, Keras, Tensorflow, Pytorch, Matplotlib, Tableau
Artificial Intelligence:	Generative AI (GenAI), Large Language Modelling (LLM)
Web Development:	HTML, CSS, Node JS, Spring Boot, React, Java Server Pages, Flask
Database Systems:	MongoDB, Oracle 11g, PostgreSQL

Education

University of Alabama at Birmingham — Birmingham, Alabama
Master of Science in Computer Science *GPA: 3.67/4.0* — Aug 2022 - Aug 2024

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 in Computer Science and Engineering *GPA: 7.32/10.0* — Aug 2015 - May 2019

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

Professional Work Experience

Tech Mahindra — Pune, India
Software Engineer — Dec 2021 - Jun 2022

- Developed and implemented a robust microservices architecture and scalable API's, reducing security vulnerabilities by 30% and ensuring compliance with OWASP guidelines.
- Collaborated with cross-functional teams to design and deliver Java Server Pages (JSP) components for the online ordering system, reducing customer checkout time by 20%.
- Served in the Kubernetes migration team, performed regular build and system tests.

IBM — Bengaluru, India
Application Programmer - Java Full Stack — Aug 2019 - Dec 2020

- Created JSP, React, and Spring Boot components for an e-commerce client, resulting in a 20% increase in website loading speed.
- Improved efficiency by reducing manual repetitive tasks through the development of Python scripts to automate log fetching and root cause analysis, saving 35 hours of work per week.
- Teamed up with testing and infrastructure teams to streamline the agile development process, resulting in a 10% reduction in time to market for new features.

Certifications

AWS Certified Cloud Practitioner, AWS, Amazon — May 2023 - May 2026
Generative AI Fundamentals, Google Cloud Skills Boost, Google — Jun 2023
Deep Learning Specialization, DeepLearning.ai and Coursera — Apr 2020
Advanced Data Science with IBM, IBM and Coursera — Sep 2019

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.

Volunteering

Sahyadri Open Source Community (SOSC) — Oct 2018 - Jan 2019
Mentored budding developers during Hactober Fest 2018 and Cognit'19 2019 at Sahyadri College of Engineering and Management, Mangaluru.

Other Work Experience

University of Alabama at Birmingham Birmingham, Alabama
Digital Engagement Specialist - Student Assistant Oct 2022 - Feb 2023

- Provide support for Department of Annual Giving to raise crowdfunding to address food insecurity amongst UAB employees, students and referred patients and educational scholarships for talented students.
- Liaise with donors and community stakeholders to provide education on issues and nonprofit goals to secure additional funding for student scholarships.
- Raised over $5k in funding over the span of two months.

Sahyadri College of Engineering & Management Mangaluru, India
Research Assistant Aug 2018 - May 2019

- Researched and evaluated various supervised classifiers to analyze EEG signals and accurately differentiate between alcoholic and non-alcoholic subjects, resulting in a classification accuracy of 92%.
- Streamlined data cleaning and feature engineering procedures through the implementation of Python scripts, resulting in a 70% reduction in manual effort and an estimated monthly time savings of 100 hours.
- Presented research findings at AIDE-19 conference, resulting in the publication of the paper in Advances in Intelligent Systems and Computing (AISC, volume 1133), Springer, Singapore.

Projects

Extractive and Abstractive Summarization on BBC News Corpus
Skills: *NLTK, Pytorch, Python, Git*
To study the performance of the extractive, abstractive and its ensemble summarization 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%.
- Analysed the performance of T5, PageRank, BERT pre-trained large language models after retraining on the BBC News Corpus.

Exploring the Performance of EEG Signal Classifiers for Alcoholism *Scikit, Python, Pandas, Flask, Git*
To evaluate the performance of supervised classifiers by analyzing their ability to differentiate between the brain signals of alcoholic and non-alcoholic subjects.

- Programmed machine learning algorithms to improve data accuracy and efficiency, resulting in a 60% increase in predictive modeling performance.
- Executed Race Algorithm to study the performance of supervised learning classifiers such as Support Vector Machine, K-Nearest Neighbors, Naive Bayes and Artificial Neural Networks.

GIS Visualization *Python, Geographic Information System, Open Street Map, Jupyter Notebooks, Anaconda*
Open Street Map visualization of three cities Birmingham (US), Mangaluru (India), Surat (India).

- Harnessed Open Street Map data within Jupyter Notebooks and Anaconda environment to render captivating street-level visualizations for the three diverse cities.
- Processed and refined data, reducing noise by 40% to produce clean and precise map visualizations, suitable for export in image format.