Contact

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s-suryakiran.github.io/ (Portfolio)

Top Skills

DataBricks

Large Language Models (LLM)

Problem Solving

Languages

English (Native or Bilingual)

Tamil (Native or Bilingual)

Certifications

Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization

Foundations: Data, Data, Everywhere

Prepare Data for Exploration

Share Data Through the Art of Visualization

Node-RED: basics to bots

Publications

Deep learning framework for component identification

Scene Understanding in Night-Time Using SSAN Dataset

Suryakiran Sureshkumar

MS in CS @ NYU Courant | Machine Learning, Software Engineering, Computer Vision, Data Science
New York, New York, United States

Summary

Hey there! I'm Suryakiran, but you can call me Surya.

I'm just a guy who's fascinated by the endless possibilities of technology. My journey started in the vibrant city of Madurai, India, and now I find myself navigating the exciting tech landscape of New York. I'm a proud graduate student of NYU's Courant Institute Mathematical Sciences pursing my Master of science in Computer Science. Before this, I honed my foundational skills during my undergrad in Computer Science.

What Gets Me Up in the Morning:
I love solving puzzles, especially when they involve data, code, and real-world challenges. Some days, I'm knee-deep in data, working as a Machine Learning Engineer. Other days, I'm the guy who's piecing together software solutions or unraveling data patterns. The thrill of turning complex issues into elegant, user-friendly solutions is what keeps me going.

Moments I Cherish:
- That day when I got the best project award at National University of Singapore for developing a website that could detect phishing sites.
- That time when the object detection model I worked on outperformed expectations by 10% - felt like scoring a winning goal!
- The day we launched the No-Code data science platform I helped build.
- Those Java parsers I developed? They made our lives so much easier by cutting manual work in half and making our data almost perfect.

Tools of the Trade:
From Python, Java, C++, to Go, I've had my hands on a myriad of programming languages. My expertise spans machine learning engineering, web development, cloud technologies, and databases.

Recently, I've been exploring Large Language Models (LLMs) and their transformative potential in the AI space. I'm a bit of a tech Swiss Army knife, always ready to tackle the next challenge.

Let's Chat:
I'm all about sharing ideas, learning new things, and collaborating. Whether you're into the latest AI trends, need a hand with a software project, or just want to talk tech over a cup of coffee, I'm your guy. Let's make something awesome together!

Experience

New York University
Teaching Assistant
January 2023 - Present (1 year 6 months)
New York, New York, United States

• Served as a TA for the following subjects :
‣ Probability, Statistics and Decision Making(CORE-UA 107)
‣ Vision Meets Machine Learning (CSCI-GA.3033)
‣ Linear Algebra(MATH-UA 140)
‣ Computer Vision (CSCI-UA.0480)

• Facilitated weekly recitation sessions to reinforce lecture materials, improve students' understanding of complex concepts in subjects including Probability, Linear Algebra, and Computer Vision.
• Designed and graded a variety of assessment materials, such as quizzes and worksheets, ensuring feedback was both constructive and timely.
• Provided tailored support during office hours, addressing individual student needs and promoting a deeper understanding of course content.
• Assisted in the preparation, proctoring, and grading of midterm and final examinations, maintaining a high standard of academic integrity.
• Collaborated closely with course instructors to align recitation and assessment materials with lecture content, enhancing the overall learning experience.

Promantus Inc
Data Engineer Intern
June 2023 - August 2023 (3 months)
Raleigh, North Carolina, United States

• Object Detection in P&ID: Spearheaded the deployment and optimization of a few-shots object detection model. Achieved a 10% boost in detection and classification accuracy over the prior solution.

• E-commerce Product Categorization: Led the application and refinement of Large Language & Vision Models, including Flamingo & Segment Anything Model. Delivered a 92% accuracy rate in product labeling and categorization.

• Automated Cash Application Development: Crafted Java parsers for cash application integration, compatible with diverse bank statement formats. This innovation slashed manual processing by 50% and elevated data accuracy to 95%.

Tiger Analytics
1 year 6 months

Analyst - Machine Learning Engineering / Analyst - Data Scientist
July 2021 - July 2022 (1 year 1 month)
Chennai, Tamil Nadu, India

• No-Code Data Science Platform Development: As the lead founding engineer, I directed the team in architecting over 30 predefined functions for data science tasks leveraging Azure Databricks and PySpark. Designed a robust backend API for execution and set up a CI/CD pipeline, enhancing deployment speed by 20%. Collaborated closely with cross-functional teams, ensuring the platform's successful launch and integration.

• Automated Shelf Analysis Mobile App: Developed a mobile application that captures and analyzes videos of store shelves, providing an accurate count of each product. This innovation led to a 60% reduction in manual counting efforts.

• Worked on big data technology(spark, databricks) to improve performance of an internal framework.

Data Scientist / Machine Learning Engineer
February 2021 - July 2021 (6 months)
Chennai, Tamil Nadu, India

• Gained experience in python for data analytics, Excel for handling and visualizing data, python packaging and distributing, and docker container deployment.

Anna University Chennai
Research Assistant
July 2019 - January 2021 (1 year 7 months)

• Deep Learning Framework for Component Identification: Contributed to a groundbreaking research project which involved designing a system to monitor a manufacturing assembly line, accurately detecting, classifying, and counting components in real-time imagery, significantly improving operational efficiency.

• Scene Understanding in Night-Time Using SSAN Dataset : Co-authored research (NCVPRIPG 2019, Springer 2020) on an innovative CCTV-based night surveillance system, improving object detection under low-light conditions using YOLOv3 model.

• Created a setup which grades the fruits into three classes (Class I-Fresh Fruits, Class IIA- Waxy fruits with disease, Class IIB-Waxy Fruits without disease, Class III-Diseased fruits(Sooty Blotch and Bitter Rot)) based on the amount of wax and freshness of the fruits especially apple and orange.

Hewlett Packard Enterprise
Summer Intern
June 2019 - June 2019 (1 month)
Singapore

• Acquired deeper understanding on Big data and Hadoop System Administration which introduced me to Big Data and Hadoop, Pseudo Mode, Setting up Cloudera Manager, HDFS Shell commands, Commissioning and Decommissioning, HDFS Quotas, Hadoop Architecture, Kerberos, Knox, MapReduce, Hive, Kafka, Flume.

• Implemented AES encryption on a file containing passwords by leveraging a MapReduce job within the Hadoop ecosystem.

National University of Singapore
Academic Intern
June 2019 - June 2019 (1 month)
Singapore

• Gained knowledge and experience in Big Data Analytics using Artificial Neural Networks which included Data Analytics, Exploratory Data Analysis, Descriptive Statistical Measures, Python Data Science Libraries, Regression Analysis, Classification, Clustering, Text Mining, Association, Artificial Neural Networks, Convolution Neural Networks, Recurrent Neural Networks.

• Developed Phishing Site Detection application, which also got the best project award at the end of the internship.

Bharat Sanchar Nigam Limited
In-plant Training
December 2018 - December 2018 (1 month)
Madurai, Tamil Nadu, India

Education

New York University
Master of Science - MS, Computer Science · (September 2022 - May 2024)

Anna University Chennai
Bachelor of Engineering - BE, Computer Science and Engineering · (August 2017 - April 2021)

Lakshmi school
ISC · (2003 - 2017)