Jithendra Puppala

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Education

New York University   New York, NY
Master of Science in Computer Science   Expected: 05/2027
- Relevant Coursework: Machine Learning, Computer Vision, Foundations of Data Science

National Institute of Technology Karnataka   Surathkal, India
Bachelor of Technology in Computer Science and Engineering   05/2023
- Relevant Coursework: Data Structures and Algorithms, Digital Image Processing, Probability & Statistics

Skills

- **Proficient**: Python, SQL, Machine Learning (Supervised / Unsupervised), Data Wrangling, A/B Testing
- **Experienced**: Deep Learning (TensorFlow, PyTorch), Computer Vision (OpenCV), Model Evaluation & Optimization
- **Tools & Infrastructure**: REST APIs, FastAPI, Docker, AWS (Amazon Web Services: EC2, S3), GCP, Git/GitHub, Linux

Work Experience

Jio Platforms Limited   Bengaluru, India
Data Scientist   06/2023 – 07/2025
- **Tech**: Python, SQL, Data Wrangling, Machine Learning, XGBoost, Random Forest, ARIMA, FastAPI, Docker, AWS, GCP
- Increased cattle heat detection **precision from 68% to 91%** and **recall from 76% to 95%** by developing and deploying machine learning models from scratch.
- Built an **ARIMA-based residual forecasting** system enabling **4-hour earlier heat detection** for **150K+ cattle**.
- Improved activity detection **accuracy from 87% to 94%** using **Butterworth-filtered accelerometer signal processing**.
- Optimized model retraining pipeline to **reduce retraining time from 18 hours to under 2 hours** and **data processing from 3 hours to just under 7 minutes**.

Accenture   Bengaluru, India
Advanced App Engineering Analyst - Intern   06/2022 – 07/2022
- **Tech**: Python, SQL, Monitoring & Logging Tools (Elasticsearch, Logstash, Kibana, Splunk)
- Researched **observability frameworks** to enhance monitoring, performance, and reliability across enterprise systems.
- Compared **5+ logging/monitoring tools** via incident detection and root-cause analysis benchmarks.
- Presented findings to **25+ engineers**, driving adoption of improved workflows that **reduced mean-time-to-detection (MTTD) by 30%**.

Projects

MixMatch on Custom Dataset   03/2022 – 04/2022
- **Tech**: Python, PyTorch, OpenCV, Deep Learning, Semi-Supervised Learning
- Implemented **semi-supervised learning** with the **MixMatch algorithm** on a custom **500** image dataset.
- Achieved a **12%** better accuracy over baseline models by applying **data augmentation** and **consistency regularization**.

Generic Library Management System   08/2021 – 12/2021
- **Tech**: Python, Django, MySQL Database
- Built a **web-based system** with Django, featuring book search, issue tracking, user authentication, and an admin dashboard.
- Deployed locally using **MySQL and Bootstrap** streamlining book management for **50+ simulated users**.

Leadership & Achievements

- **Finalist** - Harvard Crossroads Emerging Leaders Program (CELP) - 2021
  Selected among top **114** of **10,000+** global applicants for a leadership program organized by **Harvard University**.
- JEE Mains Rank: **2683** | JEE Advanced Rank: **6111** | All India ranks among **1,150,000** participants nationwide.
- **Campus Director** – Millennium Fellowship (UNAI & MCN) for NIT Karnataka.
  Led SDG-aligned civic projects; mentored 15+ fellows; coordinated workshops and campus-wide engagement.
- Webinar Host – Competitiveness Mindset Institute Designed and facilitated student leadership webinar for **3** NIT campuses (NIT Karnataka, NIT Surat, NIT Rourkela) with **over 300 participants**; coordinated content and outreach.