Phone: +916387133369 Email: tripathikiot@gmail.com GitHub: github.com/19035100Arpit LinkedIn: linkedin.com/in/arpittripathi20/

### Education

### **Vellore Institute of Technology**

Master of Technology in Artificial Intelligence and Data Science

Cumulative GPA: 9.05/10

#### Dr. A P J Abdul Kalam Technical University

Bachelor of Technology in Computer Science and Engineering

Cumulative CGPA: 7.49/10

# **Technical Skills**

• Programming Language: C, Python3.

- Databases: MongoDB, MySQL.
- MLOps Framework: MLFlow, Kubeflow, Docker, Kubernetes, EC2 Instance.
- Libraries: NumPy, Pandas, Scikit-learn, Matplotlib, Seaborn, TensorFlow.
- Data Analysis: Exploratory Data Analysis (EDA), Statistical Analysis, Hypothesis Testing.
- Machine Learning: Regression, Random Forest, naïve Bayes, SVM, K- means Clustering, SVD/PCA, Anomaly Detection.
- Deep Learning: Neural Network, CNN, RNN, LSTM, GAN.
- Development Tools & Environments: Jupyter Notebook, Google Colab, VS Code, PyCharm, Git, GitHub.
- Mathematics & Statistics: Strong foundation in Probability, Linear Algebra, Calculus, and Statistical Methods.

### **Experience**

# **Asvin Tech (DENTRA)**

Remote, India

# Machine Learning Engineer Intern (CERTIFICATE)

Jan 2024 – Feb 2024

Bhopal, Madhya Pradesh

Lucknow, Uttar Pradesh

Expected Jul 2026

Jul 2023

- Designed and deployed an OpenCV-based image processing pipeline, reducing noise by 30% and improving object detection accuracy by 25%.
- Enhanced vision-based model performance by implementing contour detection and edge filters, increasing precision from 85% to 92%.

### E & ICT Academy (CERTIFICATE)

#### **Students Ambassador**

IIT Kanpur Oct 2021 – Mar 2023

- Launched social media campaigns reaching 5K+ students, driving 40% higher event participation.
- Organized 8+ career workshops connecting 200+ students with industry opportunities.

# Prutor.ai@ IITK (CERTIFICATE)

IIT Kanpur

### Junior Software Developer Intern

Jul 2022 - Sep 2022

- Implemented testing protocols for client-server applications, reducing bug reports by 35%.
- Refined system specifications, improving deployment success rate by 20%.

### **Projects**

# Implement-the-Sparse-RBM-for-gene-selection-and-classification (GitHub Link)

Mar 2025 - May 2025

- Achieved 94% classification accuracy for leukemia subtypes using Sparse RBM, outperforming baseline models by 15%.
- Reduced gene feature dimensions by 70% through automated biomarker discovery, accelerating processing time by 40%.
- Deployed end-to-end AutoML pipeline on Kubernetes, enabling real-time model retraining and reducing manual intervention by 25 hours/month.

### I Phone Sales Analysis (GitHub Link)

Jan 2025 – Feb 2025

- Mined 100k+ sales records with Pandas/Seaborn to identify top 3 models driving 45% of revenue growth.
- Designed dashboard visualizations model, region, and time-series views enabling executive stakeholders to optimize inventory allocation.
- Formulated data-driven recommendations that informed a 15% inventory reduction in slow-moving SKUs and boosted on-shelf availability by

# Analyzed Titanic Data Set (GitHub Link)

Jun 2024 – Sep 2024

- Predicted survival with 83% accuracy using feature-engineered Random Forest (age bins, family size), exceeding academic benchmarks by
- Discovered 1st-class women had 95% survival rates through Seaborn visualizations, highlighting class/gender as critical decision factors.
- Optimized model performance by 12% through hyperparameter tuning, reducing false negatives by 22%.

## **Certifications & Training:**

- Artificial Intelligence + Machine Learning (**Prutor@IITK**) Sep 2022- Oct 2022
- Student Development Program on Artificial Intelligence + Machine Learning (Prutor@HTK) 28<sup>th</sup> Mar 2022- 1<sup>st</sup> Apr 2022 **Curricular Activities:**
- Team Lead, Buildthan 2024 Hackathon | VIT Bhopal: Led 4-member team to develop AI recommendation engine, ranking Top 5 among 50+ teams.
- Volunteer, International Conference on Data Computation and Communication (ICDCC 2024), VIT Bhopal: Contributed to the smooth execution of an IEEE-sponsored international conference by supporting organizational tasks and engaging with professionals from academia and industry.
- Served as Facilitator for the workshop titled: "LaTeX: A Tool for Technical Writing and Scientific Research with Hands-On Training," conducted on November 5th and 7th, 2024.