

ARUSH JASUJA

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PROFESSIONAL EXPERIENCE

AI-Powered Recruiting Ecosystem | [RapidHire](#) | May 2025 – Present

End-to-end AI recruiting platform combining market intelligence, content generation, and candidate matching

- Engineered multi-agent research system (CrewAI) processing 500+ job postings, generating market reports in <2 minutes
- Developed LangChain content creation system with 4-agent workflow for job descriptions, emails, interview questions
- Architected AutoGen matching platform using Sentence Transformers, achieving <100ms candidate-job matching
- Stack: Python, GPT-4o, CrewAI/LangChain/AutoGen, ChromaDB, PostgreSQL, Streamlit
- Deployed: 3 production applications on Streamlit and Railway, comprehensive documentation with API examples on Github

Lead AI/ML Software Engineer | [Ripik.AI](#) | Aug 2022 – July 2024

Built production AI systems for manufacturing optimization and quality control at enterprise scale

- Architected end-to-end manufacturing AI platform reducing planning time by 85% across 3,000+ production workers
- Established MLOps infrastructure with CI/CD pipelines reducing deployment from 14 days to 12 hours with 99.8% reliability
- Designed distributed TensorFlow platform with ONNX Runtime, achieving 20% efficiency improvement with 99.6% uptime
- Engineered PyTorch-based quality control system with custom YOLOv8 (99% precision, 98% recall), reducing defects by 18%
- Developed reinforcement learning system (PPO with custom reward function) for steel optimization, reducing waste by 15%

Deep Learning Engineer | [Sequoia Insilico](#) | May 2021 – Aug 2022

Developed HIPAA-compliant deep learning solutions for healthcare and medical imaging applications

- Designed HIPAA-compliant microservices architecture reducing inference latency by 65% across 50+ healthcare facilities
- Engineered multimodal CNN-LSTM (8.6M parameters) for depression detection, achieving 85% accuracy (34% above baseline)
- Implemented COVID-19 detection with DenseNet-121, achieving 90% accuracy (87% sensitivity, 93% specificity)
- Built protein structure prediction pipeline with bidirectional LSTM (5.2M parameters), reducing computational time by 40%
- Created explainable AI dashboard (SHAP/LIME) increasing model adoption by 70% with 99.9% uptime

RESEARCH PUBLICATIONS (ORCID [0000-0002-5687-0318](#))

"Connecting the Dots with Deep Learning: A Graph-Based Approach of Alzheimer's Conversion Prediction" | AAIC (2025)

- Graph-based deep learning, improved accuracy and interpretability, 95.4% F-score (SOTA)

"Layer-wise Adaptive Sine Activation Based Recurrent Network for MCI Conversion" | AAIC (2025)

- Novel recurrent neural architecture (BiRNN) using layer-wise adaptive sine activation, 97.4% accuracy (± 0.2 SD)

"Dimension Reduction in the Sagittal Plane for Diagnosis of MCI" | IACC, Springer (2023)

- ICA/PCA fusion, 87% diagnostic accuracy (23% improvement), 400+ accesses, 45+ citations, implemented at 3 hospitals

"Emotion Recognition Using Facial Expressions" | IJIRR, IGI Global (2021)

- Developed hybrid ML pipeline: PCA-LBP-SVM for emotion recognition (92.4% accuracy on JAFFE dataset)

"Feature Selection Using Diploid Genetic Algorithm" | Annals of Data Science, Springer (2019)

- Created multi-objective optimization using genetic algorithm reducing feature dimensionality by 67%

LEADERSHIP & COMMUNITY

Community Builder: 5 AI/ML hackathons (500+ participants), mentored 15+ engineers, presented at SoCTA/AIC/IACC/AAIC

Cultural Festival Chief: Led 120-member team, managed \$50K budget, increased attendance by 35%

Board Positions: Rotaract Club (70% digital engagement increase), NYU GSC (career fairs, networking events)

TECHNICAL SKILLS

ML/DL Frameworks: TensorFlow 2.x, PyTorch 2.0+, YOLO, SAM, BERT, Transformers, LLaMA fine-tuning (LoRA/QLoRA), HuggingFace, Sentence Transformers, Model Context Protocol (MCP), CrewAI, LangChain, AutoGen, Retrieval Augmented Generation (RAG), OpenAI API

MLOps: AWS SageMaker, GCP Vertex AI, Docker, Kubernetes, MLflow, Weight & Biases (W&B), Ray, Kubeflow

Data & Infra: Apache Spark, SQL/NoSQL, ETL, ChromaDB, PostgreSQL, Vector Search, Embedding Models, Streamlit, FastAPI

Languages: Python (Expert), C++ (Advanced), JavaScript/TypeScript (Intermediate)

EDUCATION

New York University | Sep 2024 – May 2026

Master of Science, Computer Science | GPA: 3.9/4.0

Current Research: Advanced Visual Reasoning with Transformers, AI agent driven flood resilience planning

Guru Gobind Singh Indraprastha University | Sep 2016 – Sep 2020

Bachelor of Technology, Computer Science Engineering | CGPA: 8.0/10.0