CHAITANYA CHADHA

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Experienced in AI and Data Science, leading projects to automate data pipelines & develop scalable AI solutions. Proficient in Python, SQL, AWS, Data Analysis, ML and Generative AI. Known for collaborating in end-to-end projects and driving continuous improvements. Demonstrated leadership, innovation, and problem-solving skills in fast-paced environments, excelling at transforming complex data challenges into strategic, actionable insights.

EDUCATION

School of Engineering and Applied Sciences, George Washington University, Washington, DC   Dec 2025
Master of Science, Computer Science   **GPA: 3.5**

Tech Stack

Programming: Python, SQL, Java, C/C++, HTML, Tailwind CSS, JavaScript, Typescript
Frameworks: Pandas, NumPy, TensorFlow, Keras, PyTorch, OpenCV, Scikit-learn, Streamlit, Apache Spark, Next.js, Node.js
Tools: GIT, GitHub, AWS (S3, DynamoDB, Elastic Beanstalk, SageMaker), MySQL, Power BI, Docker, MongoDB, Microsoft Office
Cloud Computing Services: Azure Cloud, AWS, Google Cloud, Vercel
Core: Machine Learning, Deep Learning, Neural Networks, NLP, Computer Vision, Agile Software Development, Statistics

PROFESSIONAL EXPERIENCE

Moneytech Business Systems : **Machine Learning Consultant |** New Delhi, India   Feb 2023 - Nov 2023

- Optimized **supply chain operations** by 28% through managing an 8-member **cross-functional** team to develop an **automated demand forecasting tool** using LSTM-based **model**, implementing **end-to-end ETL pipelines** with **ADF**, and deploying models using **AKS**, thereby **streamlining inventory management** through **ML**-driven **predictions**
- Boosted **sales revenue** by 15% by implementing a **product pricing optimization system** utilizing **DQN reinforcement learning algorithms** and **LightGBM** in **PyTorch**
- Automated **data pipelines** and leveraged **Azure DevOps** for **continuous integration** and **deployment**, enhancing operational efficiency and **model** scalability
- Reduced **part failure rates** by 32% via conducting **comprehensive failure analysis** using **CNNs** and **GANs** with **PyTorch**, utilizing **GAN-based data augmentation** to enhance **training datasets**, and implementing **anomaly detection** to identify **failure patterns**

MedPay : **AI Engineer |** Bengaluru, India   Jun 2021 - Nov 2022

- **Reduced manual data processing by 85%** and **processed over 200,000 prescriptions monthly** via **leading** the design, development, and deployment of an **automated patient** and provider **data extraction** and **analysis** tool utilizing **Git for version control**, **AWS CLI** for **shell scripting** to automate **DevOps CI/CD pipelines**, **Lambda**, **Textract** for **OCR**, **Comprehend** for **NER**, **S3**
- Implemented **Docker containerization** and **Kubernetes orchestration** via **Elastic Beanstalk** and **ECR**, seamlessly integrating with **logistics** partners (**Dunzo**, **Porter**) and **payment gateways** (**PayU**, **RazorPay**)
- Engineered an internal tool that **automated** the mapping of over 150,000 **healthcare SKUs** across multiple **databases** using **Agile and SCRUM methodologies, semantic similarity algorithms**, **DynamoDB** and **Lambda**, saving 38 hours per week
- Enhanced **patient engagement** by 65%, handling over 20,000 interactions monthly, by **collaborating** in developing a **chatbot** for patient health risk profiling, **question answering**, and **order management**; utilizing **Hugging Face Transformers**, fine-tuned **ClinicalBERT** model, and **Rasa Open Source**

Kyrion Technologies : **Machine Learning Intern |** New Delhi, India   Jun 2018 - July 2018

- Enhanced **multilingual content translation** by integrating **Seq2Seq models with attention mechanisms**, increasing translation accuracy by 30% and deployed the service on **AWS ECS** with **S3 buckets** as storage, enhancing reliability and scalability
- Developed and deployed a **metric based meta-learning algorithm** on **AWS SageMaker**, which personalized student learning paths and reducing data processing time
- Performed **data preprocessing**, **feature selection**, and **Exploratory Data Analysis (EDA)** on large-scale student performance datasets using **NumPy**, **Pandas**, and **Scikit-learn**, improving model training efficiency by 20%

PROJECTS AND RESEARCH PAPERS

JobMail: LLM Engineer (Job Search, AI-Powered Cold Email Assistance)   Oct 2024

- Built a **Llama3.1**-powered tool using **Groq** for high-performance processing, **LangChain** for **language modeling** and **intelligent text generation**, and **Streamlit**, enabling efficient **extraction** of job listings from career page URLs.
- Generated personalized cold emails with portfolio links from a **vector DB**, optimizing job outreach and response rates.

Query-Fusion: Generative AI Engineer (AI-Powered Web Interaction and Summarization)   Jan 2024

- Developed a **GPT 3.5** based **chatbot** leveraging **DuckDuckGo** search engine, **RAG** techniques, **LangChain** to optimize **language modeling** and **prompt engineering** for interactions with **OpenAI API**, **Chainlit** for **UI**, **ChromaDB** for efficient **data management**
- Implemented **real-time website summarization**, **session memory retention**, **user information retrieval** and **dynamic querying**

YouTube Analytics: Data Analytics Engineer (Content Strategy, Video Analytics)   Nov 2022

- Created **supervised learning predictive models** using **CUDA GPU** with **IBM Watson**, employing **Decision Trees**, **Random Forest**, and **XGBoost** AI algorithms to forecasting YouTube views with 78.4% accuracy, thereby enhancing content strategy for creators
- Utilized **statistical methods** and **quantitative analytical skills** including **A/B experiment** testing, **multinomial** regression model, small **feedback loops**, **fine tuning,** and **cross-validations** to validate model performance, refining predictive accuracy by 15%