Arnav Agarwal

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Education

University of Florida FL
Master of Science in Computer Science CGPA 3.70/4.00 *Aug 2023 -Dec 2024*

Manipal University India
Bachelor of Technology in Computer Science CGPA: 8.85/10.00 *Aug 2019 - May 2023*

Skills

Languages: Python, C/C++, JavaScript, TypeScript, HTML, CSS, Java, Ruby, SQL, PostgreSQL, NoSQL, PHP, Dart, Erlang, Pony, Solidity
Libraries and Frameworks: Pandas, NumPy, Matplotlib, Django, React, Next.js, TailwindCSS, Material-UI, Keras, Tensorflow, Scikit-learn, .NET Core, RESTful API
Developer Tools: Git, Docker, AWS (EC2, S3, Lambda), Unix, Agile (Scrum), Jenkins, MongoDB, GraphQL, Webpack
Technologies: AI & Machine Learning, Cloud Computing, AWS, Azure, GCP, Azure, AWS, Data Structures & Algorithms, Networks, LLM, Generative AI, Power Platform, CI/CD
Certifications:Microsoft Certified: Azure AI Fundamentals, Microsoft Certified: Azure Fundamentals, Google Cloud Skills Boost, Coursera: Introduction to machine learning, Product Management

Experience

Skan AI | *Generative AI ML Intern* | *California - Remote* May 2024 - Aug 2024

- Spearheaded development and implementation of a generative transformer model utilizing KAN layers for noise cleaning and advanced data pre-processing and tokenization techniques, to generate the 'next best sequence of optimal tasks in a user process workflow'.
- Achieved a 25% improvement in model accuracy compared to previous versions, successfully uncovering hidden patterns and relationships in user process tasks for analysis, process and task optimization etc.
- Applied techniques like gradient accumulation, mixed-precision training, and advanced hierarchical clustering techniques, efficient dimensionality reduction, memory optimization, etc. ensuring efficient model performance and results for conclusive analysis.

IIT Roorkee | *Summer Research Intern* Jul 2021 – Sept 2021

- First-authored a research paper with an IIT-Roorkee Professor on deep learning COVID-19 X-ray image classification.
- Improved accuracy by 10% and reduced processing time by 20% compared to existing methods.
- Developed an accelerated diagnosis model, increasing efficiency by 50% as an alternative to conventional approaches.

Projects

Eventsigator | *Event Finder Using Microsoft Power Platform*

- Leveraged the full-stack Power BI ecosystem to create a web application, where I made event discovery and promotion exceptionally easy using HCI concepts.
- Significantly reduced user search time by about 80%, addressing the need for a centralized source of university event information.
- Uniquely integrated UXD concepts, calendar features, and the GPT-4 API helped me achieve the top three best projects in class.

ConvoGenie | *Generative AI Conversational Avatar with Advanced Content Summarization*

- Employed the LangChain library and OpenAI's Generative AI APIs for interactive dialogues and media summarising.
- Ability to distill complex information from videos and PDFs, enhancing user engagement and understanding.
- Developed a tool in Generative AI technology platforms, representing new benchmarks for interactive and intelligent data interpretation.

MotionSpeak | *Sign language transcriber using machine learning*

- Employed the SSD MobileNet architecture was used to achieve quick performance.
- Achieved an impressive accuracy rate exceeding 98% in recognizing and predicting over 30 gestures.
- Achieved rapid results in under 10ms, making it a valuable tool for individuals unfamiliar with ASL.