ADARSH KAASULA

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Experience

Radical AI   *Jun 2024 - Present*

Artificial Intelligence Intern | Internship | Remote, United States of America

- Collaborated with the AI development team to design and integrate AI-powered features into the RadicalX platform, enhancing the KAI AI Teaching Assistant, using Gemini AI, Google Cloud Services and advanced NLP, machine learning, and deep learning techniques for social good.
- Improved user experience and performance through research, data analysis, and the development of personalized learning algorithms.
- Designed and fine-tuned AI models, implemented algorithms, and presented findings. Technologies used: OpenAI, TensorFlow, LangChain, ChromaDB, React.

Cisco Systems, Inc.   *Aug 2020 – Dec 2022*

Software Consulting Engineer | Full time |Bengaluru, India.

- Spearheaded the development of a Django Plugin with Cisco's Japan team, enhancing Netbox application functionality.
- Implemented an automated workflow system, reducing document processing time by 50% and increasing operational efficiency by streamlining approval processes.
- Served as the Product Owner for Airtel, adeptly resolving intricate issues within Cisco's Fault Management and Performance Management application, ultimately ensuring the highest level of customer satisfaction.

Cisco Systems, Inc.   *Jan 2020 – Jun 2020*

Software Consulting Engineer | Internship| Bengaluru, India.

- Revamped the CICD Jenkins pipeline, achieving a 60% reduction in manual effort for remote device configurations.
- Implemented efficiency enhancements within Network Service Orchestration, showcasing adept automation skills.
- Gained valuable insights into software development methodologies and demonstrated problem-solving skills.

Skills

- **Programming**: Python, C, HTML/CSS, PostgreSQL, My SQL, JavaScript
- **AI / ML**: Natural Language Processing (NLP), TensorFlow, Scikit-Learn, OpenCV, Pytorch, Image Processing, Machine Learning Algorithms, ChromaDB
- **Web Development**: Django Framework, Flask Framework, React, FastAPI
- **DevOps**: Docker, Kubernetes, Jenkins CICD, Ansible, GitHub
- **Networking**: TCP/IP, OSI Model, Routing and Switching (OSPF, BGP, STP, VLANS), ARP, NAT, DHCP, Cisco IOS, Socket Programming
- **Tools and Utilities**: Postman, Git, MATLAB, MS Excel, MS Office, MS Word, Arduino
- **Cloud Services**: Google Cloud Platform, Google Cloud Vertex AI, Firebase, Amazon Web Services (AWS), Microsoft Azure, Google Cloud

Education

Masters in Computer Science   *Jan 2023 – Dec 2024*

University of Alabama at Birmingham | Birmingham, AL.

Bachelors in Electrical and Electronics Engineering   *2016 – 2020*

Vidya Jyothi Institute of Technology | Hyderabad, India.

Projects

KAI AI Backend | Radical AI

- Collaborated with the Radical AI team to develop various AI-driven features including quiz generation from PDFs, slides, and websites, flashcard generation from YouTube links, and a syllabus generator for teachers.
- Implemented flashcard generation from multiple file formats to aid in educational processes.
- Technologies: Python, Google Cloud Services, TensorFlow, LangChain, ChromaDB, React, Gemini AI, Firebase.
  Demonstrates expertise in backend development, AI integration, and collaborative open-source project contributions.

Gemini Quizify | Radical AI

- Developed a web application that generates quizzes from uploaded PDF documents using Streamlit and Langchain, integrated with Google Cloud's Vertex AI.
- Key Features**:** Real-time quiz generation, interactive chat with PDF content, and advanced NLP capabilities for dynamic content extraction.
- Implemented a unique "Chat with PDF" feature, enabling users to query PDF documents in natural language and receive contextual answers.
- Technologies: Python, Streamlit, Langchain, Google Cloud Vertex AI, ChromaDB, Firebase.
  Demonstrates expertise in AI-driven application development, real-time data processing, and innovative feature integration.

Student AI Assistant | Personal Project

- Developed an AI-based student assistant application using Google's Gemini API.
- Key Features: Real-time speech-to-text transcription, automated note generation, cloud storage for transcriptions and notes, and instant doubt resolution.
- Integrated Firebase for user authentication and data storage, ensuring secure access to notes and transcriptions.
- Implemented a quiz functionality to help students assess their knowledge based on lectures.

- Technologies: Python, Flask, Google Gemini API, Firebase, SpeechRecognition library.
  Demonstrates expertise in AI integration, real-time data processing, and cloud-based application development.

Predicting Parkinson's Disease | UAB: Foundation of Datamining Course
- Investigated Parkinson's disease prediction using age, sex, and gut microbiome data.
- Implemented five tree-based ML algorithms, achieving insights into disease prediction.
- Identified potential gut microbes as biomarkers for Parkinson's disease.
- Technologies: Python, ML (Random Forest, AdaBoost, CatBoost, LightGBM, XGBoost), Data Analysis

Network Traffic VPN Classifier | Personal Project
- Developed a machine learning model to classify network traffic as VPN or Non-VPN, enhancing network security.
- Utilized a Random Forest classifier trained on relevant features extracted from network traffic data.
- Achieved an accuracy rate of 98% with high precision and recall, ensuring reliable classification of network traffic.
- Technologies: Python, scikit-learn, pandas, joblib.
  Demonstrates expertise in machine learning model development, feature engineering, and network security.

File Sharing Web Application | UAB: Cloud Computing Course.
- Designed and developed a Flask-based web application for secure file sharing.
- Integrated AWS S3 and SNS for scalable storage and email notifications
- Technologies: Python, Docker, Flask, AWS S3, AWS SNS, PostgreSQL, HTML/CSS.
  Demonstrates expertise in web development and cloud integration.

Certifications

- Explore Generative AI with the Vertex AI Gemini API Skill Badge (Issued by Google Cloud) *May 2024*
- Cisco Certified Network Associate (CCNA) *Aug 2020 – Aug 2023*
- Cisco Certified DevNet Associate *Jun 2020 – Aug 2023*
- Implementation Implementing and Administering Cisco Solutions *Jan 2020*
- Classify Images with TensorFlow on Google Cloud Skill Badge *May 2024*
- Google Cloud Computing Foundations: Cloud Computing Fundamentals *May 2024*

Course Works

Data Structures and Algorithms • Networking • Cloud Computing • Cloud Security • Software Engineering • Database App Dev • Systems Programming • Computer Vision • Fundamentals of Data Mining • Modern Cryptography • Cyber Risk Management