Here is the biography in a plain, readable text format:

Biography of Bharath Girirajan

Personal Information:

Bharath Girirajan, a dedicated Master's student in Business Analytics and Project Management at the University of Connecticut, brings over three years of professional experience in data analytics, machine learning, and project management. Passionate about leveraging technology to drive innovation, Bharath specializes in deploying advanced analytics solutions to solve complex business challenges.

• Email: bharath.girirajan@uconn.edu

• Linkedin: linkedin.com/in/bharath-karthick/

• **GitHub**: <u>github.com/Bharath0726</u>

Summary:

Bharath has a proven track record of developing and deploying machine learning models, including building an LLM-based cryptocurrency chatbot that improved prediction accuracy by 15%. With certifications in Power BI, Azure, and Oracle, he is skilled in utilizing tools such as LangChain, AWS, and PostgreSQL. His expertise lies in combining technical and analytical skills to generate impactful insights and optimize performance across diverse domains.

Education:

- Master of Science in Business Analytics and Project Management, University of Connecticut, School of Business (Aug 2023 – Dec 2024)
- Bachelor of Engineering in Electronics and Communication, Anna University, Chennai, India (Sep 2017 – Jun 2021)

Technical Skills:

- Programming Languages: Python, Java, MS-Excel
- Databases: PostgreSQL, Oracle SQL Developer
- Cloud and Big Data Platforms: Azure (Blob Storage, Data Factory, Data Lake), AWS (S3, RDS, EC2)
- Techniques: Machine Learning, Exploratory Data Analysis, Neural Networks, NLP, Web Scraping, Hypothesis Testing, Time Series Analysis

- Large Language Models & APIs: OpenAl GPT APIs (GPT-3, GPT-4), Hugging Face Transformers, LangChain
- Business Intelligence Tools: Power BI, Tableau, Visio, Matplotlib, Seaborn
- Certifications:
 - Microsoft Certified Power BI Analyst (PL-300)
 - Microsoft Azure Fundamentals (AZ-900)
 - Oracle Certified Associate (1Z0-808)

Work Experience:

Database Administrator Intern

Allied Health Science Department, University of Connecticut, Storrs (Jan 2024 – May 2024)

- Cleaned and standardized over 10,000 student records from multiple sources using Python, improving data accuracy by 25%.
- Designed and deployed a Power BI dashboard that provided real-time insights into student performance, leading to a 15% increase in identifying at-risk students.
- Built and documented a comprehensive data dictionary and back-end architecture for long-term department use, streamlining manual data processing by 40%.

Programmer Analyst

Cognizant Technology Solutions, Chennai (Client: Incomm Payments, Atlanta, USA) (Oct 2021 – Jul 2023)

- Collaborated with cross-functional teams to analyze user requirements, design database schemas, and develop SQL queries, increasing payment gateway efficiency by 20%.
- Functioned within a 10-member project team in a fast-paced Agile environment, orchestrating seamless application deployments.
- Designed and implemented REST-based API solutions for applications like SCAN Reload and Remote Deposit Capture.
- Enhanced security by mitigating URI-based threats with regex expressions, achieving a 100% reduction in vulnerabilities.

Python Instructor, Intern

Netzwerk Academy, Bangalore (Aug 2020 – Mar 2021)

• Taught advanced Python concepts to 20+ students, resulting in a 95% improvement in understanding and application of Pandas, Matplotlib, Seaborn, and statistical analysis.

Key Projects:

- Cryptocurrency Chatbot Development: Built an LLM-based chatbot for real-time market signaling using LangChain and Hugging Face, improving market prediction accuracy by 15%. Deployed on AWS using Docker with a Streamlit interface for user interaction.
- Insurance Premium Prediction (MLOps Project): Developed a machine learning pipeline to automate insurance premium predictions, achieving an R² score of 0.92. Integrated Docker for containerization on AWS EC2, reducing server downtime by 50%.
- Real-Time Human Movement Detection: Created real-time systems with 95% face recognition accuracy and person counting using Raspberry Pi. Published research in the "Turkish Online Journal of Qualitative Inquiry."

Hobbies and Interests:

- Sports: Cricket enthusiast and admirer of MS Dhoni and Chennai Super Kings.
- Music: Aspires to learn the ghatam and enjoys exploring Tamil movies like "Maharaja."
- Languages: Learning Hindi and Telugu for cultural enrichment.

Certifications:

- Microsoft Certified Power BI Analyst (PL-300)
- Oracle Certified Associate (1Z0-808)
- Microsoft Azure Fundamentals (AZ-900)
- Azure Al Fundamentals (Al-900)
- Microsoft Azure Data Fundamentals (DP-900)

Current Projects:

- Developing **TradeGPT**, an LLM-powered chatbot for cryptocurrency trading using Groq API and LangChain.
- Exploring RAG-based generative Al applications in OPIM 5894 lab using Dify and Gemini.

Career Goals:

- Aspires to become a leader in Business Analytics and Artificial Intelligence.
- Aims to create innovative solutions for real-world challenges in healthcare, finance, and e-commerce.

Fun Facts:

- Favorite Food: Chicken biryani made by his mom.
- Adventurer: Excited to explore the fall colors in New Hampshire.

Personal Connections:

• In a relationship with: Haritha Gokul, Operational Analyst at M2P Fintech.

Professional Testimonials:

- "Bharath consistently delivered exceptional results, displaying deep technical understanding and meeting all sprint milestones." — Dwiz Kumar, Lead Software Engineer
- "His innovative use of machine learning models significantly improved decision-making processes." — Mentor, Allied Health Science Department

Let me know if any adjustments are needed!