PARTH KOHALE
Computer Science
Engineering Student

f20220276@dubai.bits-pilani.ac.in
+971 54 246 4209 (Dubai, UAE)
www.linkedin.com/in/parth-kohale-671534290

OBJECTIVE: To secure an internship in computer engineering, leveraging my programming skills and project experience to contribute effectively to a dynamic team.

EDUCATION

- **Bachelor of Engineering in Computer Science**
  Bits Pilani Dubai Campus

- **CBSE 12th**
  GH. Raisoni Vidyaniketan

ACHIEVEMENTS

- International Astronomy Olympiad – Secured Gold Medal (2020)
- Inter-School National level Earthquake Quiz organized by IIT-Kanpur: Second position (2019)
- National Talent Search Examination (NTSE) – Cleared first round with an "A" grade equivalent (2019)
- Qualified for JEE-Advanced

SOFT SKILLS

- Fluency in spoken and written English and Hindi language.
- Have strong ability to work under pressure and efficient problem-solving & Leadership skills.
- Take initiative, ownership of task at hand and can work without any supervision

TECHNICAL SKILLS

Web Development	HTML, Tailwind CSS, React
Programming Languages and Tools	Python, Javascript, C, Java, Github, Git, Visual Studio Code, PyCharm, Jupyter Notebooks, Postman
Database	MySQL, MongoDB, Supabase
Operating System	LINUX, Windows, Mac OS

CERTIFICATES

- CS50: Introduction to Computer Science – Harvard University
- Python for Data Science and Machine Learning Bootcamp - Udemy
- Google Data Analytics Professional Certificate
  The Complete Python Bootcamp – Udemy
- The Complete 2024 Web Development Bootcamp – Udemy
- Masterclass: Python For Machine Learning and Data Science – Udemy

TECHNICAL EXPERIENCE

Open-Source Contributions

- Contributed to various open-source projects on GitHub, enhancing features and fixing bugs.
- Collaborated with global developers, improving code quality and project documentation.

Website Development

- Designed and developed multiple personal websites using Tailwind CSS, JavaScript, and React.
- Built responsive and user-friendly UIs, ensuring seamless cross-device compatibility.
- Deployed websites using Netlify, Vercel, and GitHub Pages for efficient hosting and performance.

Data Science & Machine Learning (Ongoing)

- Currently working on data science and machine learning projects, focusing on Python, pandas, NumPy, scikit-learn, and TensorFlow.
- Exploring data analysis, visualization, and predictive modeling techniques.
- Applying NLP and deep learning for text analysis and AI-driven applications.
- Gaining experience with Google Cloud, Jupyter Notebooks, and large-scale data processing.

PROJECTS

Personal Portfolio Website

- Designed and developed a responsive personal website to showcase projects and skills.
- Utilized Tailwind CSS and React-Vite for front-end development.
- **Live Demo: Portfolio**

Ink & Insight: AI-Powered PDF Analysis & Comparison Tool

- Developed a Flask web application to analyze and compare PDF documents using Google Cloud Vision, Mathpix APIs, and BERT-based semantic analysis.
- Implemented text and handwriting similarity detection to identify shared content across documents.
- Integrated BERT embeddings to evaluate semantic flow and writing style consistency.
- Designed an interactive web interface with real-time results and detailed PDF report generation.
- Leveraged Google Cloud Vision & Mathpix APIs for OCR-based text extraction.
- Optimized processing speed with CUDA-compatible GPU support for deep learning models.
- **GitHub Repository: Ink & Insight**

FlappyNN: AI-Powered Flappy Bird Game

- Developed an AI that learns to play Flappy Bird using neural networks and genetic algorithms, built with Pygame.
- Designed a custom neural network architecture with input features including distance to pipe, height difference, and bird velocity.
- Implemented a genetic algorithm for training, using crossover and mutation to evolve better-performing agents over generations.
- Integrated real-time visualization, displaying network activations, connection weights, and training metrics for enhanced interpretability.
- Added adjustable game speed (1x-10x), population size, and mutation rate controls for fine-tuning AI training.
- Continuously improves over generations, optimizing decision-making for higher scores.
- **Live Demo: FlappyNN | GitHub Repository: FlappyNN**