Vaishnavi Shirsath

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EDUCATION

Krea University, Sri City 2021 - 2024

Bachelor of Science (Hons.) - Computer Science

WORK EXPERIENCE

Krea University, Sri City

Peer Tutor Aug '23 - Jan '24

- Provided one-on-one tutoring for freshman students in introductory mathematics and computer science courses, enhancing their understanding and performance.
- Facilitated group doubt-clearing and coding sessions to address common challenges and foster collaborative learning.

Undergraduate Research Assistant

Jun '23 - Aug '23

Cumulative GPA: 8.66/10

- Assisted Dr. T.V.H. Prathamesh in formalising proofs in graph theory and group theory, contributing to the advancement of theoretical understanding.
- Developed proficiency with the interactive theorem prover Isabelle, applying various proof techniques to validate mathematical theories and support research objectives.

Antarang Foundation, Mumbai

Advocacy and Communications Intern

Jun '22 - Aug '22

- Updated and maintained the foundation's website to ensure current and relevant content.
- Collaborated with the communications team to develop engaging content for social media platforms.
- Conducted research to support the foundation's upcoming advocacy campaigns, contributing to strategic planning and content development.

PROJECTS AND RESEARCH

- **Bionic Reading Convertor :** Created a tool that transforms standard text into a bionic reading format, a technique that highlights specific letters in words to enhance reading speed and comprehension. Designed and implemented the application using HTML, CSS, and JavaScript.
- Mock Portfolio: Designed and implemented a showcase portfolio to demonstrate web development skills and project highlights. Built using HTML, CSS, and JavaScript to create a responsive and visually appealing presentation. Included various project displays and interactive elements to effectively showcase work and skills.
- Capstone Project: Conducted an in-depth capstone project focused on matching algorithms, supervised by Dr. Meesum Syed and Dr. Pratik Ghosal. Developed and implemented various matching algorithms using Python. Investigated and evaluated competitive ratio algorithms to identify and propose improvements. Compiled research findings and algorithmic developments into a comprehensive final thesis.
- EPL Win Predictor: Used historical EPL match data to build and deploy machine learning models for predicting match outcomes. Utilised Random Forest Classifier and Linear Regression to forecast match results. Conducted a comprehensive comparison of model accuracy and precision to determine the most effective algorithm for predicting EPL match winners. Enhanced model precision to 62.50% using rolling averages.

SKILLS

- **Programming Languages :** Python, Haskell, C++, Racket, JavaScript
- Technologies and Tools: MySQL, HTML, CSS, Machine Learning Libraries
- Core Competencies: Object Oriented Programming, Version Control, Design and Analysis of Algorithms, Research, Debugging.

CERTIFICATIONS

- Web Development Fundamentals, IBM (2024)
- Artificial Intelligence Fundamentals, IBM (2024)