PRITHVIRAJ ARVIND PAWAR

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OBJECTIVE

Results-driven Software Developer with experience in designing and optimizing scalable software solutions using Java and Python. Skilled in developing RESTful APIs, microservices, and integrating front-end components with ReactJS and Tailwind CSS. Proven ability to collaborate with cross-functional teams, conduct in-depth code reviews, and deploy applications to cloud platforms like Microsoft Azure. Eager to leverage expertise in full software development lifecycle, performance profiling, and CI/CD practices to contribute to innovative and impactful projects.

EDUCATION

Master of Science: Computer Science — Rolla, MO
Missouri University of Science and Technology — Aug 2022 - May 2024

Bachelor of Engineering: Electronics Engineering — Mumbai, India
Mumbai University — Aug 2018 - May 2022

SKILLS

Programming languages (Backend): C, C++, Python (Django), Java, Java GUI, MATLAB, R.

Web development languages (Frontend): HTML, CSS, JavaScript, React.js, Next.js, Tailwind CSS.

Data Visualization: ggplot2, Tidyverse, Matplotlib.

Database-related technologies: Hadoop, HBase, Apache Hive, Pig, Apache Spark, MongoDB, SQL, NoSQL, MySQL PostgreSQL, SQLite.

Machine Learning: Scikit-learn, TensorFlow, Keras, PyTorch.

Cloud Technologies: Azure, Cloud Data, Cloud Networking, Cloud Security, Cloud Services, Cloud Storage, Virtualization.

Operating systems: Linux, Windows.

Software known: MATLAB, Tanner Spice, Proteus, XAMPP, NI Multisim, Arduino, Cameo, Excel, Git, GitHub.

PROFESSIONAL EXPERIENCE

Junior Software Developer — Odessa, Florida (Remote)
Solutions UI/UX — June 2023 - May 2024

- **Developed and optimized custom software solutions** using Java, and Python, focusing on performance, scalability, and modular architecture for diverse client applications.
- **Collaborated with cross-functional** teams to gather detailed technical requirements and translate them into robust software designs, utilizing design patterns and object-oriented principles.
- **Implemented and integrated front-end** components using ReactJS and Angular and developed RESTful APIs and microservices with Node.js and Express to enable seamless communication between client-side and server-side applications.
- **Conducted in-depth code reviews, performance profiling, and debugging** using tools such as Git and Docker to ensure code quality, version control, and continuous integration/continuous deployment (CI/CD) practices.
- **Enhanced performance and reliability** of applications by automating build processes and deploying to cloud platforms like Microsoft Azure, ensuring high availability and fault tolerance.

Graduate Teaching Assistant — Rolla, MO
Missouri University of Science and Technology — Aug 2022 - May 2023

- **Led instruction for Data Structures and AI courses**, benefiting over 100 students.
- **Provided personalized tutoring and support**, resulting in improved student performance. Graded 50+ assignments weekly, offering constructive feedback.
- **Created and refined course materials** in collaboration with faculty, improving curriculum and teaching methods.
- **Fostered inclusivity by supporting diverse students** through tailored teaching methods. Improved teaching techniques by implementing strategies learned from pedagogical workshops and conferences, resulting in a more engaging learning environment.

PROJECTS

Project for Artificial Intelligence: AI chess — Rolla, MO
Missouri University of Science and Technology — Jan 2023 - May 2023

Chess Algorithm Development and Implementation

- **Developed search algorithms** to find the next move with an average response time of 0.02s, achieving a 40% increase in speed compared to a standard basic search algorithm.
- **Optimized neural network design** by refining layers and parameters, resulting in enhanced algorithm performance.
- **Evaluated and implemented local search algorithms**, providing personalized recommendations and improving decision-making efficiency.
- **Implemented** Breadth-First Search (BFS) and Depth-First Search (DFS) algorithms for efficient traversal in AI chess algorithms.
- **Developed and implemented** Time-Limited Iterative-Deepening Depth-Limited MiniMax (IDDL-MiniMax) algorithm for AI chess, achieving a 25% improvement in search efficiency compared to traditional MiniMax.
- **Enhanced the AI chess algorithm** with Time-Limited Iterative-Deepening Depth-Limited MiniMax using Alpha-Beta Pruning, significantly reducing search space and improving algorithm performance by 30% in terms of computation time.

Project for Computational Intelligence: Gender Recognition using CNN — Rolla, MO
Missouri University of Science and Technology — Aug 2022 - Dec 2022

- **Trained a CNN-based gender recognition model** with a diverse dataset of 10,000 images, achieving 95% accuracy.
- **Conducted real-time testing** of the model with a dataset of 500 faces, achieving an impressive 92% accuracy in accurately identifying gender.

Final Year Project Bachelors: Real-Time Object Detection Using Different Edge Detection Technique — Mumbai, India
Mumbai University — Dec 2021 - May 2022

- **Conducted in-depth research** on 10 Edge Detection techniques, identifying the optimal method for Object Detection, and achieving a 15% accuracy improvement.
- **Developed a MATLAB-based program** with the chosen technique, demonstrating 20% faster processing on still and real-time images.
- Rigorously tested program, achieving 90% success rate in varied scenarios.

Published research paper titled "Real-Time Object Detection Using Different Edge Detection Techniques", contributing insights to the field.

CERTIFICATIONS

Microsoft Certified: Azure Fundamentals
https://www.credly.com/earner/earned/badge/d3c564de-c03f-40da-9822-06bdc6a3425e

HONOURS AND ACTIVITIES

- **Provost's Masters International Scholarship**
- **CEC Deans Intl Masters Ac Scholarship**