Varshani Reddy Patlolla

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EDUCATION

- **Texas A&M University** — College Station, TX
  Master of Computer Science; GPA: 4.0/4.0 — *Aug 2022 - May 2024*
- **National Institute of Technology** — Raipur, India
  Bachelor of Technology in Computer Science and Engineering; CPI: 8.58/10.0 — *Jul 2016 - May 2020*

TECHNICAL SKILLS

- **Languages**: Python, HiveQL, C++, C, SQL, Bash, JAVA, Ruby, Java Script, PHP, HTML, CSS
- **Frameworks/Lib**: Hadoop, Ruby-on-Rails, Django, Scikit, React, OpenCV, NLTK, SpaCy, TensorFlow, Flask, Pandas, Numpy
- **Databases**: Apache Hive, PostgreSQL, MySQL, SQLite, Firebase
- **Platforms**: Linux, MacOS, Windows, Huawei-DevOps[AI-DevOps, CloudDragon, WiseOper],Azure, AWS, Docker, Heroku
- **Technologies**: Machine Learning, Big Data Hadoop, App Development, BlockChain, Web Development, Recommendation Systems, Computer Vision, NLP, Cyber Security, Version Control(git, svn), CI/CD
- **Certificates**: Java - ECQ (Java Enhance Code Quality Exam) by Huawei

EXPERIENCE

- **Texas A&M University** — College Station, TX
  Web Developer/Tester & Computer Science Grader — *Jan 2023 - Present*
  - **Student Technician - Web Developer/Tester**: As a Student Technician, I adeptly utilize Microsoft Azure, Kentico, C#, ASP.NET, MVC, IIS Web Server, and Content Management Systems to excel in web development, testing, and technical support roles, ensuring the seamless operation of robust and scalable applications.
  - **Student Assistant - Computer Science Grader**: As a grader for "Design and Analysis of Algorithms CSCE 411" under Prof. Timothy Davis, I ensured precise evaluation and constructive feedback for students' assignments.

- **Huawei Technologies India Pvt. Ltd.** — Bangalore, Karnataka
  Senior Software Engineer — *Aug 2020 - Jul 2022*
  - **HiveQL Automation, Feature Engineering and Streamline Hive Workflows**: Developed and automated 30 Hive tasks to analyze logs and generate tags or features for partitions (OLAP), facilitating rule engines (e.g., account safety, payment authentication, and authorization). Streamlined Hive task workflows in WiseOper portal for test and development environments, ensuring efficient dependency handling and partition management.
  - **Offline ML Models**: Designed and developed 11 risk detection models and scoring systems in Python utilising ML libraries, averaging approximately 15 features per model. Managed HiveQL log analysis, development and orchestrated over 100 Hive tasks for feature calculation. Contributed to an improved risk assessment accuracy of more than 92%.
  - **End-to-End DevOps Configuration**: Took complete ownership of configuring DevOps for ML models. Set up workflows for data synchronization between OneData Clusters (prod to test, OneData test to AIdevops explore) and configured access and querying(HiveQL) of OneData clusters from DevOps Model Training Platform (MTP), improving the model development time by more then 60%. Resolved resource allocation, docker images, and model deployment issues in AIdevops MTP environments.
  - **Deployment Component Management**: Developed more then 20 components to manage requests to deployed ML models and handled component version deployments via cloud uploads, version build repositories, cloud Dragon pipelines, and gray releases. Oversaw service deployments in the AIdevops MEP Production environment and ensured resource and AZ allocation for services. Collaborated effectively with cross-functional teams to troubleshoot DevOps issues during Model Deployment.
  - **Documentation and Rulebooks for AIdevops**: Thoroughly documented the end-to-end processes and rulebooks for AIdevops, ensuring clear and concise guidelines for the deployment and management of machine learning models.

- **Ittiam Systems Pvt. Ltd.,** — Bangalore, Karnataka
  Software Engineering Intern - Computer Vision — *May 2019 - Jul 2019*
  - **Project**: Enhancement of foreground detection and background modeling in videos using the OpenCV library
  - **Implementation**: Explored diverse solutions to enhance foreground detection & background modeling. Achieved more than 50% accuracy improvement on the datasets by interpreting histogram peaks and valleys of the motion. Utilized C++ (vectors) and Python (numpy) for efficient video data-sets processing.

OTHER PROJECTS

- **Fridge2Table (Django, Bootstrap, PostgreSQL, Python)**: Developed a recipe recommendation website with personalized suggestions based on item-item CF, cosine, and Jaccard similarities, considering dietary restrictions.(Jan 2023 - May 2023)
- **FashioNXT CRM Service(Ruby on Rails, PostgreSQL)**: Developed a feature-rich CRM solution for FashioNXT agency, including event invites, website analytics, user access management, and data handling.(Sep 2022 -Dec 2022)
- **Enhanced security mechanism through blockchain for e-polling/counting using IoT devices(Hyperledger Fabric, IBM Blockchain Platform, JavaScript)**: an innovative e-voting platform with heightened security(Jan 2020 - May 2020)
- **HealthBot (Machine Learning, Android Studio(Java), Google DialogFlow)**: A chatbot integrated android application for early stage disability symptoms in children (Jul 2018 - Aug 2018)

AWARDS/ HONORS

- Excellent Contributor award at Huawei Technologies India Pvt. Ltd.
- Management Improvement award at Huawei Technologies India Pvt. Ltd.
- Top 5 in the final 105 teams at the SKYhack hackathon organized by the Chhattisgarh government and AIC@36inc

VOLUNTEER EXPERIENCE

- **Hadoop Trainee**: Config Software Solutions, Hyderabad, Telangana, India(May 2018 - Jul 2018)
- **Android App Development Trainee**: Config Software Solutions, Hyderabad, Telangana, India(May 2017 - Jul 2017)