

Prathyusha Devabhakthini

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EXPERIENCE

Graduate Software Engineer, Willis Towers Watson | Cambridge, UK

July – Aug 2022

- Developed end to end web API using C#, .Net framework, Entity framework, Azure, Angular.
- Developed Integration with object-oriented software design and programming, Design practices, test cases for the application.
- Collaborated with team in delivering the tasks in time with Agile best practices.

Software Developer Intern, West infotech | Bangalore, India

Dec 2019 -Dec 2020

- Designed and implemented web APIs applications like Interactive Dictionary and WEB Maps Applications using Python.
- Tasks - creating a work plan, collecting data, Gantt charts, monitoring the delivery of work, and reviewing the project.
- Developed Integration with object-oriented software design and programming, test cases for the application, which helped in continuous Integration/continues deployment process.
- Analyzed data and solved practical technical problems; proposed to optimize the interface of systems to simplify the operating procedures.

EDUCATION

Anglia Ruskin University, Cambridge, UK Jan 2021 – May 2022

MS in Artificial Intelligence and Big Data with Distinction.

Case studies: Advanced Digit Recognition, Image Processing and Classification, Audio Processing, Natural Language Processing, Recommender Systems, and Financial Applications.

Mohan Babu University, Tirupati, India June 2016 – May 2020

B. Tech Computer Science and Engineering with 83.37%.

Coursework: Data Structures and Algorithms, Web Development, Database Management, Theory of Computation, Operating Systems, Information Security

ACHIEVEMENTS

- With the top score of master's students (91%), I won the "Best Computing and Information Science Postgraduate Dissertation Student Prize" for my master's dissertation, "Analyzing the Impact of Adversarial Attacks on Text Data with Explainability of Machine Learning NLP Model."
- Received "The International merit Scholarship" from Anglia Ruskin University.
- Received "Prathiba Award" from Chief minister of my state with scholarship for the exemplary performance in high school.

SKILLS

Computing: C, C++, Java, Python, C#, HTML, CSS, JavaScript, TypeScript, Design Patterns, .Net core, Web API, Angular, Docker, Entity Relationship Framework, Docker, CI/CD pipelines.

Database Management: SQL, Oracle 12c, OWL (Semantic Web)

Cloud: AWS Services, Deployment, Azure data studio

Machine Learning and Data Processing Libraries: Excel for data analysis, ETL, Statistical modelling, TensorFlow, Keras, Scikit Learn, OpenCV, NLTK, NumPy, Pandas.

Visualization tools: Tableau, Matplotlib, Seaborn.

Other Technologies: Linux, Unix, Shell Scripting, Git, Visual Studio Professional, code

PROJECTS

Scrum Team Feedback (Group Project)

As part of my intern, developed an end-to-end Health check Portal with .Net framework, Angular, and Azure data studio. (Contributed to both backend and frontend)
Implemented Entity Relationship Framework, Signal R concepts for real time data syncing between client and server.

Triangle Problem - Implemented a C# web application in multi-layer architecture with best practices following design principles and patterns (following Solid Principles, mocked unit tests with MOQ objects, and optimized code with benchmarks).

Analyzing the impact of Adversarial examples with

Explainability of NLP Model (Thesis)

Implemented machine learning techniques to generate the Adversarial attacks with different Text Attack recipes on NLP model and explained the effect of attacks on ML model with LIME explainability algorithm.
Compared the Explainability results on two datasets with 3 pre-trained models from transformers. (Bert-based, Roberta, and xlnet)

University search system using semantic data

Technologies (ontology, SPARQL, C#) - Implemented search systems using semantic data technologies - Ontology, RDF/RDFS, OWL and SPARQL as a Query language to search and filter students from different campuses with different filters.

Future Sales Prediction using Advanced machine learning techniques

- Implemented machine learning regression models to predict and compare sales predictions from Kaggle challenge. Models used - Linear regressor, KNN, SVR, XGB, LGBM, and ensemble of two or more regressors.

Time-Series Analysis, Visualization and Forecasting

Proposed multi-layer LSTM recurrent neural network to predict and compare multiple stock prices for Tesla and Reliance Industries with historical data available on yahoo finance.

Driver Distraction Prediction - Predicted distracted driver images accurately using multiple convolutional neural network architectures with image data.

Dog Breed Classification - Classified 120 breeds of dogs from Kaggle dataset extracting features from multiple CNN architectures for better performance.

Optimization of ligand compatibility in model drug simulation

-Developed a web-based interface to measure the fitness and detect the best Pharmacophore that suits.

VOLUNTEER

Project Leader | Team Member - Collaborated with colleagues on my undergraduate and postgraduate projects to organize resources and enable the delivery of a project on time.

Volunteer | Student Fest - In the publicity team for publicizing our college techno-cultural fest (Mohana Mantra) in 2017. As a volunteer, I have interacted with many students and guide them to take part in various activities at our fest.

Coordinator | Mohan Babu University - In the placement's selection process, I have helped the recruitment team to coordinate with my fellow students.