Prajwal Y Maredukonda ✉

Teach, Design and Develop applications in **Java**, **Python**, **React**, and C#. Former Graduate Student of Kennedy College of Science at the University of Massachusetts, Lowell.

Experience

November 2020 - * as an Assistant Professor at Vardhaman College of Engineering

- Teach students in Computer Science Department at Vardhaman College.
- Incubating our startup Yayin with Centre for Innovation and Entrepreneurship at Vardhaman.

2018 - * as a Freelancer, Personal Instructor, Founder at Yayin AI Pvt Ltd

- Designing two of our own makers projects which are currently in protyping stages.
- R&D for the Yayin, an early-stage startup web application which guides to an AI-based personalized travel experience.
- Taught **300/400 level courses** on `Java`, `Python`, and 100/200 level courses on Information Security.
- Collaborated with a psychology graduate to implement **comprehensive lesson plans** that accommodated a student with autism for one-on-one learning sessions.
- Pursued master's in information systems management at Trine University from Spring 2018 to Fall 2019.

2016 - 2017 as a Cyber Security Researcher at Koninklijke Philips N.V.

Backend Developer and Researcher for the CISO R&D Team at Philips Healthcare division in Andover, MA, USA.

Threat Learning Platform

- A Web-based application prototype for storing and analyzing threat data streams, building entity-relationship models. data visualizations through various open-source and internal threat streams.
- Developed on `Spring 4.x`, `Apache Wicket`, and ReactJS frameworks with `OrientDB` database and `Lucene` search Engine.
- Forked open-source repository Stucco and deployed with customizations on AWS to collect and parse various threat streams.

Threat Awareness & Training

- Research on **Microsoft Exchange Server** addon development, engage in third-party vendor comparisons and evaluations for enterprise security solutions.
- Developed a **Microsoft Outlook** plugin that identifies the reported phishing awareness campaign emails to the security operations center mailbox by employees and filters them.

Anti-Phishing Platform

- A **Microsoft Outlook** add-on, which notifies users when accessing outlook about suspicious values indicative of phishing by analyzing headers (SPF, DKIM, etc..) and email body.
- Designed a `C#` component that analyzes email headers. It also allows reporting a phishing email with the analysis result.
- Developed a `VB.Net` system process that eased interactions with machine learning algorithms written in `Python` and the `C#` component.

2015 - 2016 as a Software Engineer at Symbiosys Solutions Inc

Symbiosys Solutions is based in Concord, NH. They provide IT expertise, day to day support for the software suite that manages the life cycle of unemployment insurance claims for the for NH Employment Services Staff, Claimants and Employers in New Hampshire Unemployment Insurance System.

- Fix defects through `CA Harvest` tickets in the existing system codebase developed using `JSP`, `Servlets`, and `JDBC` modules, and followed **MVC** architecture with `Oracle 12c` as the database.
- Enhanced the existing NHUIS to reflect the updated United States Labor Department RESEA program.

- Document and Redesign the help section for NHIUS using `Adobe Robohelp` and supporting **Section 508** and **W3C standards**.
- Rewriting the codebase of the existing system to modern frameworks viz: `Spring` and `Hibernate ORM`.

2013 - 2015 as a Graduate Student at the University of Massachusetts, Lowell

> Awarded Master of Sciences in Computer Science degree.

- In Spring 2014, I worked on a machine learning course [project](#) that performed sentimental analysis on movie reviews and predicted the review rating.
- In Summer 2014, I interned at GrateCare an MIT based startup for Nine weeks.
- In Fall 2014, developed an `Android` [application](#) for students to post classifieds about books with auto price suggestions, ability to scan ISBN codes and other students could send a request to buy the book.
- In Spring 2015, I developed a `Python` based web application on **20 Questions Game** for the `AI` coursework.

2012 - 2013 as an Associate Software Engineer at Tech Mahindra

> Java Developer for the Mahindra Satyam subsidiary in Hyderabad, India.

- Designed proof of concept web applications for Dorms Allocation, Bus Ticket booking for Agents, and the Indian Railways Ticket booking systems on `Java-EE`, `Struts`, `Spring 3.x`, `Hibernate ORM` and `JDBC`.

Integrated Test Data Management

- A Tool to support test data generation for projects, to fulfill the test data requirements, and to upload the data into different environments. It is developed on `Spring MVC` and `Spring-JDBC` framework modules.
- Designed user interface as `JSP`, `HTML`, `XML`, `CSS3`, `AJAX` based pages for Ticket Creation and Status Check modules.
- Developed unit test cases, designed database schemas, and validated data with `MySQL` queries.

2007 - 2011 as a Student at the Balaji Institute of Technology and Sciences

> Awarded bachelor in computer science & engineering degree from Jawaharlal Nehru Technological University.

- In Spring 2009, I designed `HTML` pages, `SQL` queries, and database schemas for a web-based discussion forum project developed on `ASP.Net` framework for the students and professors in a school.
- In Fall 2010, presented a paper on `Semantic Deep Web` at IIIT Hyderabad, India.
- In Spring 2011, I developed a `Java-J2EE` based implementation for the paper published in the **IEEE** magazine titled **Histograms and Wavelets on Probabilistic Data**.

Skills

Primary Code Environment	`Java`, `Python`, `Windows 10`, `Windows Subsystem for Linux (WSL2)` & `VS Code`
Also Knows	`C#`, `VB.Net`, `C`, `C++`, `CSS`, `HTML`, `JavaScript`
Databases	`Oracle`, `MySQL`, `OrientDB`, `MongoDB`
Frameworks	`Struts`, `Hibernate`, `Spring`, `Apache Wicket`, `Django`, `Node`, `ReactJS`
Tools	`Eclipse`, `Git`, `MySQL Workbench`, `Postman`, `Jupyter`

Research Interests & Certifications

- Certified `Hibernate ORM Level 1 developer` from Tech Mahindra.
- Completed Web designing certification at Inspire GEC.
- Member of MSDN Dream Spark Program & ACM.
- Machine Learning & `AI`, `Information Security`, `NLP` for Aryan and Dravidian Languages & Travel.