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 IN COMPUTER SCIENCE AT VARDHAMAN COLLEGE OF ENGINEERING

- Teach courses about **Basics of the IoT** and **Fundamentals of Cybersecurity**.
- Oversee the design and typical updates for the `WordPress`-based website with the faculty from other departments and the team at the development consultant for the school.
- Manage the **Microsoft 365** email infrastructure.

2018 - * AS A FREELANCER, PERSONAL INSTRUCTOR, FOUNDER AT YAYIN AI PVT LTD

- Designing two makers' projects which are currently in prototyping stages. R & D for the web application to provide an AI-based personalized travel experience for travelers.
- 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 **Masters 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 in Andover, MA, USA.

THREAT LEARNING PLATFORM

- It is a Web-based application prototype for storing and analyzing threat data streams, building entity-relationship models. It also provided data visualizations built 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

- It is 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 Inc. is located in Concord, New Hampshire. It provided information technology services and day-to-day support for the software suite at New Hampshire Unemployment Insurance System. These applications manage the life cycle of unemployment insurance claims for the Employment Services Staff, Claimants, and Employers in New Hampshire.

- Fix defects through `CA Harvest` tickets in the existing system codebase. It was designed on `JSP`, `Servlets`, `JDBC` modules, and `Oracle 12c` as the database. It followed `MVC` architecture.
- 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 degree in Computer Science.

- 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, The application could scan ISBN codes to give suggestions about prices and autofill fields. It also allowed students to send a request for buying 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 at Mahindra Satyam in Hyderabad, India.

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

INTEGRATED TEST DATA MANAGEMENT
- It is a tool to support test data generation for projects, fulfill the test data requirements, and upload the data into different environments. It was 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 Bachelors degree in Computer science & engineering 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 the 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

Preferred Environment	`Java`, `Python`, `Windows 10`, `WSL2` & `VS Code`
In the Loop	`HTML`, `JavaScript`, `C#`, `VB.Net`, `C`, `C++`, `CSS`, `PHP`, `Go.`
Databases	`Oracle`, `MySQL`, `OrientDB`, `MongoDB.`
Frameworks	`Struts`, `Hibernate`, `Spring`, `Apache Wicket`, `Django`, `Node`, `React`, `GatsbyJS`, `HUGO.`
Tools	`Eclipse`, `Git`, `MySQL Workbench`, `Postman`, `Jupyter.`

CERTIFICATIONS

- Participated in a three-week faculty development program at KL University on **Research Perspectives on AI, ML, Data Science, and IoT**.
- Certified as `Hibernate` ORM Level 1 developer from Tech Mahindra.
- Completed a Web designing certification course at Inspire GEC in 2012.
- Member of MSDN Dream Spark Program & ACM.

RESEARCH INTERESTS

- Machine Learning & `AI`, `Information Security`, NLP for Aryan and Dravidian Languages & Travel.