

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 DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING AT VARDHAMAN COLLEGE OF ENGINEERING

- Taught courses on **Basics of the IoT**, **Cloud Computing** and **Virtualization**, and **Fundamentals of Cybersecurity**.
- Certified Program Coordinator for **AICTE LITE Web Development Minor** and **Google Cloud Career Readiness**.
- Manage the inter department website coordinators team, redesign, perform typical updates and bug fixes for the **WordPress**-based website of the organization.
- Manage the **Microsoft 365** infrastructure of the college.

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

- We are designing two makers' products (fabrication and mass production stage).
- Designing a 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** add-on 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 May 2015.

- 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	WordPress, Struts, Hibernate, Spring, Apache Wicket, Django, Ruby on Rails, Node.js, React.js, Gatsby.js, and 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.