# Srijita Chandra

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## EDUCATION

#### Masters, Computer Science

August 2021 - Present

Iowa State University, Ames, IA

Courses: Advanced Databases, Advanced Machine Learning, Reinforcement Learning, Algorithms for Large Datasets

## Bachelor of Technology, Information Technology

July 2014 - May 2018

SRM Institute of Science and Technology, Chennai, India

9.40/10.0

Courses: Data Structures, Analysis of Algorithms, Machine Learning, Data Mining, Software Engineering

#### TECHNICAL SKILLS SUMMARY

Languages: Python, JavaScript, Java, Node.js, C#, .NET, VBA, React.js, KnockoutJS

**Databases:** MySQL, Neo4j, MongoDB Web Technologies: HTML5, Less CSS, Bootstrap

Tools: Eclipse, Jupyter, Atlassian JIRA, Postman, ServiceNow, VS Code, Git, Azure DevOps Technologies/Frameworks: BLAST, Power Automate, Power BI, Oracle Commerce Cloud, jQuery, RESTful API

**Operating Systems:** Windows, Linux, Mac

# Work/Internship Experience

# Software Development Intern, Syngenta, Iowa, USA

May 2024 - Present

- Developing optimized, dynamic seed inventory management system by integrating backend database systems with frontend UI systems.
- Building automated notification systems for enhanced communication between plant breeders and customers.
- Analysing trends in the seed orders system and visualizing the findings in PowerBI dashboards.

# Application Development Intern, IdRamp, Iowa, USA

June 2022 - August 2022

- Developed dynamic, responsive web application for event hosting website using C#, Javascript, HTML, Bootstrap
- Optimized user interface for mobile devices by reducing page load time to 11%

# Software Developer, Full Stack, Tata Consultancy Services, Chennai, India

July 2018 - July 2021

- Implemented scalable and robust e-commerce solutions using Oracle Commerce Cloud, KnockoutJs, Node.js for Zebra Technologies.
- Developed user-friendly functionalities including quick cart which decreased the average order placement time by 25%
- Created REST APIs and webhooks using Node.js to handle integration for seamless data transfer between Oracle Commerce Cloud, order management systems, in-house payment systems, ERP
- Key contributor in providing post-production on-call support for the project
- Trained new recruits for easy integration with the team

#### Software Developer, Full Stack, Excelencia, Chennai, India

May 2020 - October 2020

- Developed scalable B2C e-commerce solution using Oracle Commerce Cloud, KnockoutJS, HTML, CSS for Pierce Washington
- Created product details page leveraging HTML5, CSS3, and JavaScript, which resulted in a 18% increase in user engagement and significantly enhanced the page's appeal to customers

# RESEARCH EXPERIENCE

#### Graduate Research Assistant, Iowa State University, Ames, Iowa

August 2022 - Present

- Developed a web tool for Basic Local Alignment Search Tool (BLAST) for Porcine Reproductive and Respiratory Syndrome (PRRS) virus database to facilitate similar virus search by veterinarians
- Automated data wrangling techniques using Python to pre-process the data retrieved from multiple sources using SQL
- Implemented a process to auto-update attributes of PRRSV genetic data in a database in order to reduce look up time
- Researching techniques for efficient classification and clustering of PRRSV genetic data

#### Projects

#### Othello game, Reinforcement Learning

**Tech:** Python, Pytorch

- Implemented Othello playing agents using reinforcement learning algorithms Q-learning and SARSA
- Trained model for 2,00,000 training episodes to gain a 80% winning ratio

## House Price Prediction, Machine Learning

- Implemented Linear Regressor, XGBoost, Gradient Boosting Regressor and Random Forest machine learning models to predict house prices
- Pre-processed dataset (handling outliers, data normalization)
- Identified performance improvement parameters to improve accuracy to 88%

#### Pattern Mining using Apriori Algorithm, Data Mining

Tech: Python, NLTK, MongoDB

• Implemented Apriori algorithm on COVID-19 dataset to mine frequent itemsets

# • Pre-processed data to perform dimensionality reduction

# Sentiment Analysis, Data Analytics

**Tech:** Python, NLTK • Extracted tweets from X (Twitter) using publicly available APIs. Classified tweets into positive or negative sentiments

#### Graduate Teaching Assistant, Iowa State University, Ames, Iowa

August 2021 - May 2022

- Mentored 30+ undergraduate students in small group setting for mobile application development course
- Provided guidance on skills, methods, and techniques while offering timely feedback
- Conducted help sessions, graded assignments, and reported grades online

# **PUBLICATIONS**

- Chandra, Srijita, et al. "Have we seen this PRRSV before? When? SDRS PRRSV BLAST An informative tool to support swine veterinarians and producers." (2024) 55th Annual Meeting of American Association of Swine Veterinarians. (Accepted)
- Srivastava, M., Pallavi, S., Chandra, S., & Geetha, G. (2018). Comparison of optimizers implemented in Generative Adversarial Network (GAN). International Journal of Pure and Applied Mathematics, 119(12), 16831-16835.

# LEADERSHIP AND CO-CURRICULAR

- Member, Calcutta Classicals dance group, Iowa State University (2021-2023)
- Public Relations Organizer, IT Association, SRM Institute of Science and Technology (Academic year 2016-17)
- Organizing Team, SRM Hackathon (Academic year 2016-17)
- Committee Member, IT Association, SRM Institute of Science and Technology (Academic year 2015-16)
- Team Member, The Gaming Fest, Milan'16 (Cultural Fest), SRM Institute of Science and Technology