

# PRITHVIRAJ CHAUDHURI

p.chaudhuri1993@gmail.com | (+1) 9847771056 | Raleigh, NC USA | [linkedin.com/in/prithviraj-chaudhuri-455413b2/](https://www.linkedin.com/in/prithviraj-chaudhuri-455413b2/) | <https://prithviraj-chaudhuri.github.io/>

## TECHNICAL SKILLS

Programming Languages - Tensorflow, ScikitLearn, HTML5, CSS3, R, MATLAB, Python, Java, JavaScript, jQuery, Angular, PHP, C#, ASP.NET, OpenMP, MPI, CUDA, Makefiles, Git, MySQL, MongoDB, PostgreSQL, Travis  
Platforms & Frameworks - ServiceNow, OpenEdx, Java Spring Boot, OpenShift and Docker, REST APIs, Java and Python Unit Testing  
Certifications - Oracle Certified Java SE 7 Programmer, ServiceNow Certified System Administrator, EXIN Certified DevOps Master, ITIL Foundation Certified, TCS Internal E0 Angular JS Certified

## EDUCATION

**Master of Computer Science** GPA – 3.92 May 2021

North Carolina State University (NCSU), Raleigh NC

Courses – Artificial Intelligence, Parallel Systems, Automated Learning and Data Analysis, Compiler Construction

**Bachelor of Technology**, Computer Science and Engineering GPA – 8.71/10 June 2016

RCC Institute of Information Technology (Affiliated to Maulana Abul Kalam Azad University of Technology), Kolkata, India

## WORK EXPERIENCE

**Graduate Research Assistant**, North Carolina State University January 2020 – May 2021

- Implemented custom learning components on OpenEdx for better course construction
- Established automated course restructuring using existing student performance
- Customized OpenEdx environments for automated deployment and migration of courses between environment
- Developed Django administration panel to enable easy setup and configuration of applications across multiple servers
- Automated deployment of applications across servers using Docker and docker-compose

**Full Stack Web Developer Intern**, Red Hat May 2020 – August 2020

- Used Java Spring Boot and Pug/Jade to implement bulk upload of data to resource management application
- Enhanced search application to enable smart searching of employee records in the organization
- Containerized applications to establish automated deployment using OpenShift and Jenkins
- Designed and developed automated deployment driven by Jenkins and Git for faster delivery times and easy maintenance
- Studied feasibility of deploying applications on multiple cloud platforms of OpenShift

**Systems Engineer**, TATA Consultancy Service Ltd, Kolkata India. July 2016 – August 2019

- Implemented Service Catalog on ServiceNow for end users to utilize ServiceNow ITSM modules using CMS
- Integrated ServiceNow with external systems to streamline information flow
- Automated tasks by translating manual processes to system and leveraging ServiceNow orchestration platform
- Designed and developed a unified REST API integration application on ServiceNow to enable faster integration
- Migrated Service Catalog hosted in CMS to Service Portal using Angular JS
- Established asynchronous data exchange between ServiceNow and Microsoft Active Directory

## PROJECTS

### Systems Projects

- Improved performance of simulation algorithm by leveraging parallel device and multithreaded capabilities of CUDA, OpenACC, OpenMP and MPI. Optimized algorithm by carefully managing memory operations.
- Studied performance benefits of the same algorithm by leveraging parallel processing using CUDA, OpenACC, OpenMP and MPI
- Used OpenMP to implement parallel sorting algorithms for evaluating performance benefits vs overheads

### Data Science

- Studied performance of various transformer networks, CNNs and word embeddings in terms of Bleu Score and Cosine similarity on flickr9k dataset
- Performed a study on Multimodal Classification performance (using Python TensorFlow) vs Single mode classification on Yelp dataset to prove whether multimodal performance is better than standard classification
- Sentiment Analysis of Tweets (Java, Cassandra, Natural Language Processing). Retrieved large counts of tweets from Twitter and stored in a single node Cassandra database and classified to positive or negative statements and extracted keywords to group together similar tweets