

Saurabh Gulati

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EDUCATION

Indiana University Bloomington

Masters in Computer Science

*Applied Algorithms, Object Oriented Software Development, Applied Distributed Systems,
Machine Learning in Signal Processing, Deep Learning Systems*

Bloomington, IN

Anticipated May 2023

Indian Institute of Technology Patna

Bachelors in Chemical Science and Technology (CGPA - 7.63/10)

Patna, India

August 2019

TECHNICAL SKILLS

Languages: Java, Python, C, C++, MySQL, JavaScript, React JS, Node JS, jsPsych, R

Frameworks and Technologies: Spring, Hibernate, Django, Tensorflow, Keras, PyTorch, Docker

Developer Tools: Git, BitBucket, TravisCI, Visual Studio, AWS EC2, Eclipse, MS Office

Operating System: Windows, Unix, Linux, Mac OS

EXPERIENCE

Graduate Research Assistant

Professor Zoran Tiganj

October 2021 – Present

Bloomington, Indiana

- Developed a modified version of Relative Judgement of Recency (JOR) task with variable presentation rates to study the effect of time lag vs. item lag in memory representation
- Hosted the experiment on PsiTurk to gather real-time data and analyze performance of the participants

Business Operations Associate

ZS Associates Ltd.

Jun 2019 – Aug 2021

Pune, India

- Understood client business, their marketing and brand strategies to provide analytical reports on regular basis which help in improving the efficiency of the sales and marketing programs
- Created reporting solutions by designing, developing and implementing dashboards (Tableau, PPT, Excel) to track performance after compiling inputs from multi-functional client stakeholders on metrics for financial assistance, demand volume performance, source of business, etc.
- Developed project plans, estimated resource requirements, established timelines, tracked project lifecycle, and reported issues that impact project progress to both the clientele and senior leadership
- Led and mentored a team of 3-4 associates ensuring excellent project delivery along with improving team's skills and efficiency leading to a direct increase in report quality

Machine Learning Intern

Quickheal Technologies Ltd.

May 2018 – Jul 2018

Pune, India

- Collaborated to develop a binary classifier to classify system portable executable (PE) files
- Worked on improving the efficiency of the classifier by using various models such as Random Forest, Convolutional Neural Networks and Recurrent Neural Networks along with leveraging various attributes from PE files
- Coded maintainable and extensible code utilizing Keras and TensorFlow libraries in Python

Software Engineering Intern

Eidetic Consulting

May 2017 – Jul 2017

London, U.K.

- Designed and developed a cross platform end-to-end application utilizing Ionic Angular JS and SpringBoot-Hibernate, BitBucket for version control
- Created several pages, implementing frontend design using Ionic along with backend request and data handling using SpringBoot in a JAVA environment
- Handled database management by incorporating complex SQL queries in the backend APIs

PROJECTS

Intelligent Tutoring Strategies for Students with Autism Spectrum Disorder

Aug 2019 – Dec 2019

- Collaborated to create a reinforcement learning-based intelligent tutoring system which generates sequential adaptive long-term tutoring policies for teaching children with ASD
- Researched and implemented the tutoring system as a Partially Observable Markov Decision Process and used proximal policy optimization to increase efficiency of the RL model to learn effective policies
- Co-presented the work at AAAI 2020 AI4EDU workshop in February 2020 in New York

Graph-based Gene Selection Technique using Protein Interaction Information

Jan 2018 – Feb 2019

- Researched and developed an graph-mining based algorithm to identify proper subset of features (genes) from the protein-protein interaction (PPI) data, which further takes part in sample classification
- Co-authored the work using the Gene-selection technique, published in international IEEE journal - Journal of Biomedical and Health Informatics