Suumil Roy

sroy22@ur.rochester.edu | https://www.linkedin.com/in/suumilroy/ | +1 (585) 303-1366 | https://github.com/BoaConst

EDUCATION

University of Rochester   **Rochester, NY, USA**
Master of Science, Computer Science (Recipient of 30% merit-based scholarship)   *Aug 2022 – Dec 2023 (Anticipated)*
Algorithms, Deep Learning, Mobile Visual Computing, Parallel & Distributed Systems, Data Science at Scale.   **GPA: 3.60/4.00**

Manipal Institute of Technology   **Manipal, Karnataka, India**
Bachelor of Technology, Computer Science (Minor in Intelligent Systems)   *Jul 2014 – Jul 2018*
Data Structures, Object Oriented Programming, Operating Systems, Computer Networks, Compilers, Machine Learning.   **GPA: 3.50/4.00**

SKILLS

Technical: Apache {Cassandra, Hive, Hadoop, Ignite, Kafka, Redis, Solr, Spark, Velocity}, Android, Angular, Bash, Blockchain, C/C++, C#, CI/CD {Azure DevOps, Jenkins}, CSS, Cuda, Databricks, Deltalake, Docker, Documentation, Embedded Perl, Flask, Git, GitHub, Go, Groovy, Gradle, HTML, Hibernate, Hystrix, IntelliJ IDEA, Java, Atlassian {JIRA Server Development, Confluence}, JavaScript, JSP, Jest, jQuery, Keras, Kubernetes, LaTeX, Linux, Maven, Microservices, MPI, Mockito, MongoDB, Netlify, Nginx, NLTK, NPM, OpenMP, OpenCL, OpenCV, Perl, Postgres, Python, PyTorch, ReactJS, Robot Operating System (ROS), Rust, Spark, Spring {Boot, JPA}, SQL, Sybase, TensorFlow, TypeScript, VSCode, Yolo.

Soft: Concise, Confident, Communication, Critical Thinker, Empathetic, Polite, Receptive, Team Player, Time Management, Versatile.

WORK EXPERIENCES

D&G Analytics (Cybersecurity Start-up)   **Sunnyvale, CA, USA**
Software Development Engineer Intern   *May 2023 - Current*
• Developed key integration frameworks to automagically scan packages from customer endpoints to provide proactive threat intelligence.

BlackRock Inc.   **Gurugram, Haryana, India**
Software Development Engineer 2, Platform Engineering   *Jan 2022 – Aug 2022*
• **Introduced Application Drift Report in Java** to detect missing software dependencies, presciently avoiding ~**20%** of **production failures.**
• **Reduced** the overall checkouts processing time **by 30%** via **Angular UI** developed to track the progress of checkout jobs.

Software Development Engineer 1, Site Reliability Engineering   *Jul 2018 – Dec 2021*
• **Accelerated** Release Management (RM) process by **600%** by delivering a **leaner** RM tool powered by **CI/CD data** on **Spring Boot** & **Angular.**
• **Introduced** the ability the **live status** of a release with diagnostic details (**Angular**), helping **debug 70% of all deployment failures.**
• **Customized JIRA** based Release Management app via **JavaScript & Groovy** automating canary & sensitive releases, **reducing errors** by **100%**.
• **Revitalized** the unreliable **EmbPerl-based** Configuration Management (CM) tool using **Spring-Boot** & **Angular** with **99.99% up-time** and **reduced load** on central database **by >40%** by exposing API's for CM data.

Software Development Engineer Intern, Core Software Infrastructure   *Jan 2018 – Jun 2018*
• **Optimized a legacy Perl-based process by 25000%** via **Spring-Boot-Ignite-based** Release Metadata **Caching System.**

Indian Institute of Technology   **Kharagpur, West Bengal, India**
Software Development Engineer Intern, Professor Jayanta Mukhopadhyay   *May 2017 – Jul 2017*
• **Co-developed IMediX (tele-medicine system)** for **cancer patients,** later **scaled** to tele-consult **10,000 COVID-19 patients/day.**
• **Implemented** a **rule-based** system to prescribe dosage based on patient attributes, **reducing** the **average consulting time by 30%**.

GRADUATE EXPERIENCES

Simon Business School, University of Rochester   **Rochester, NY, USA**
Graduate Teaching Assistant, Professor David Tilson: Big Data (CIS442F)   *Feb 2023 - Current*

Department of Computer Science, University of Rochester   **Rochester, NY, USA**
Graduate Research Assistant, Professor Yuhao Zhu: Horizon Labs   *Jan 2023 – May 2023*
• **Developed** interactive games aimed at enhancing the vision of color-blind using **ReactJS** and made the website public.

Graduate Teaching Assistant, Professor Sreepathi Pai: Computer Organization & Design (CSC 252/452)   *Sept 2022 – Dec 2022*

UNDERGRADUATE EXPERIENCES

Manipal Institute of Technology (MIT)   **Manipal, Karnataka, India**
President, ACM Manipal Chapter   *Jan 2017 – Aug 2017*
• **Improved** MIT's research culture via mentorship programs, technical workshops and events. Setup ACM for Women.

AI Path Planning Developer, Project Manas (Finalist in Mahindra's $1M Driverless Cars Challenge)   *Feb 2016 – Dec 2016*
• **Optimized Global Path Planning** of our self-driving car **by 20%** via **relaxed A*** algorithm in **ROS (C++)**.

INDEPENDENT PROJECTS

• **DeepMusicClassifier**: Trained a GRU model using **Keras** to classify music by genre, outperforming benchmark ML algorithms by **5%.**
• **Caller.ai:** Pitched a self-learning agent on **Python** during AngelHack to optimize any call canter's operational cost by **>20%.**
• **Parallel-K-Means**: Achieved **5 and 10 times** speedup by implementing K-Means on **MPI** and **OpenCL** respectively.

ACHIEVEMENTS / CO-CURRICULAR ACTIVITIES

• **IEEE Create-a-thon 2023:** Stood 2nd for text-based multilingual health information system built on **Twilio, Google Translate & Open AI API's.**
• **Olympiads: Rank #7** and **Rank #37** in **Junior Science Talent Search Examination & National Talent Search Examination** respectively**.**
• **Lead Vocalist:** The Last Verdict (High School), The Empyrean (Undergrad), School of Rock (BlackRock Inc.).