# Srija Mukhopadhyay

srija.mukhopadhyay@research.iiit.ac.in | + 91 869-7573-169
Github: sri-ja | LinkedIn: ajirs

## SKILLS

### PROGRAMMING

Languages
Python • C++ • C • Java
Racket • Javascript • MySQL • BASH
Frameworks and Libraries
PyTorch • TensorFlow • HuggingFace
OpenCV • Scikit-Learn • NLTK
Node.JS • ReactJS • Django • Flask

### SOFT SKILLS

Leadership • Time Management
Organisation • Public Speaking

## PUBLICATIONS

Unraveling the Truth: Do VLMs really Understand Charts? A Deep Dive into Consistency and Robustness | EMNLP 2024

## EDUCATION

### INTERNATIONAL INSTITUTE OF INFORMATION TECHNOLOGY HYDERABAD

Hyderabad, India
BTech in Computer Science
MS in Computational Linguistics
2021 - 2026 (Expected)
CGPA : 8.87 / 10
Dean's List Awardee

### VIVEKANANDA MISSION SCHOOL

Kolkata, India
PCM + Computer Science
2006 - 2021
$10^{th}$ : 98 %
$12^{th}$ : 98.75 %

## COURSES

Deep Learning
Statistical Methods in AI
Introduction to Natural Language Processing[*]
Advanced Natural Language Processing
Principles of Programming Languages
Compilers
Neural Natural Language Generation
Information Retrieval and Extraction
Data Structures and Algorithms
Analysis and Design of Algorithms[*]
Operating Systems and Networks
Design and Analysis of Software Systems
Linear Algebra and Probability

Last Updated: 11th January 2025

## EXPERIENCE

### UNIVERSITY OF PENNSYLVANIA AND ARIZONA STATE UNIVERSITY | Undergraduate Researcher
Jan 2024 - Present
Currently conducting research on multi-modal models, with a focus on evaluating their performance and robustness in visual question answering for charts and maps.
This work is in collaboration with Prof. Dan Roth, Prof. Vivek Gupta, and Adobe Research. Co-authored a paper as the first author, accepted at EMNLP 2024. Other papers currently under review.

### GOOGLE | SWE Intern
May 2024 - August 2024
Worked as a part of the Android PDF team, implementing an end to end pipeline for obtaining and selecting images in PDFs.

### GOOGLE | STEP Intern
May 2023 - July 2023
Worked in the GCS Metering team to implement integrity checks on the usage records generated by the team in order to ensure that the data is valid before being sent for billing.

## PROJECTS

### PRODUCT ATTRIBUTE DETECTION | Sept, 2024
Implemented a novel technique for recognizing product attributes from images by fine-tuning Florence-2-base using negative sampling. Team placed 14th in the Amazon ML challenge out of 70000+ participants.
Tech Stack PyTorch, HuggingFace

### EXPLORING ANSWER SENTENCE SELECTION | Nov, 2023
Implemented methods for selecting the best answer sentence among possible candidates using Neural Networks and Transformers.
Tech Stack Python, PyTorch

### NANOPASS COMPILER | May, 2024
Designed a nanopass compiler from scratch in racket, for racket. The compiler could handle variables, loops, tuples and functions.
Tech Stack Racket

### NETWORK FILE SYSTEM | Nov, 2023
Built a Network File System prototype allowing basic storage facilities along with concurrent client connections and multiple storage servers.
Tech Stack C

## AWARDS

| Year | | |
|---|---|---|
| 2024 | Winner | Google Generation Scholarship |
| 2024 | Winner | JPMorgan Chase Quant Research Mentorship |
| 2022 | Winner | D. E. Shaw Deisis Ascend Educare Fellowship |
| 2021 | National | Panini Linguistics Olympiad (PLO) |
| 2021 | National | Indian National Informatics Olympiad (INOI) |
| 2020 | National | Indian National Informatics Olympiad (INOI) |

* Served as a Teaching Assistant for these courses.