

Harsh Mishra

312-776-4684 | mishraharsh169@gmail.com | [Linkedin](#) | [Portfolio](#)

SUMMARY

Computer Science Masters with 2 years of Industry experience as a Systems and Software Engineer at Hewlett Packard Enterprise. Passion revolves around Data Engineering and the application of Machine learning algorithms. Experienced in automating infrastructure and deployment using CI/CD.

EDUCATION

University of Illinois at Chicago (UIC) - *Master of Science in Computer Science*; Chicago, IL; August 2021 - May 2023; GPA: 3.85/4.0

People's Education Society University, (PESU) - *Bachelor of Technology in Computer Science and Engineering*; Bangalore, India; August 2015 - May 2019; GPA: 8.08/10.0

PROGRAMMING SKILLS

Proficient: Python, C , R, Ansible, SQL

Familiar: Scala, Java, PowerShell, Matlab, Javascript, D3js

Application/Software: Tableau, Amazon Web Services, Docker

LABORATORY WORK

Computer Science Department, UIC September 2021 – December 2022, *Research Assistant*

- Trained Score based Generative Models using non-Gaussian noise. The paper has been selected for presentation as a poster at the MMLS 2023 conference. Pre-print of the research paper available on [arxiv](#).
- Researched on enhancing Information propagation and node labeling in Graph Neural Networks, when being applied on Event-stream data.

WORK EXPERIENCE

Hewlett Packard Enterprise (HPE) - *Systems and Software Engineer*; Bangalore, India; July 2019 – July 2021

- Developed scripts to automate the deployment of MLOps as a Service offering and gained experience in using APIs, porting PowerShell scripts to Python and using Ansible for deployment.
- Modeled Cyber threat patterns using Graph Databases and algorithms and Involved in writing SQL queries using the Neo4j software.

INTERNSHIP EXPERIENCE

Hewlett Packard Enterprise (HPE) - *Software Engineering Intern*; Bangalore, India; January 2019 – July 2019,

- Deployed a DataOps pipeline using open source applications and developed bash scripts to automate the CI/CD pipeline.

ACADEMIC/SIDE PROJECTS

Streaming Pipeline - Built an end to end Log Analysis Pipeline. Hadoop Spark & MapReduce was used to crunch the log data, the results were streamed using kafka. D3.js was then used to visualize the streamed results. (Scala)

Image Recognition - Implemented a Neural Architecture Search (RL-NAS) to find the best combination of filters which aid recognition of CIFAR-10 images. The filters used included various Computer Vision defined filters like Harris Corner Detection, blurring etc. using OpenCV. (Python - PyTorch)

Abstractive Summarization - Developed a fully automated setup, which extracts tweets for a given keyword, in a given time period, and produces a concise summary along with the tweet sentiments. Google's T5 model was Fine Tuned for the Abstractive Summarization task. (Python)

Causal Inference - Developed a causal analysis pipeline to identify factors that influenced public sentiment during the COVID-19 pandemic. The work included using algorithms to find causal graphs and then utilizing Bayesian Networks to find the conditional probabilities. (Python)