

SNEHA SUNDAR

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Education

University of Illinois Urbana-Champaign

Bachelor of Science in Computer Science & Statistics

May 2026

GPA: 3.74

Experience

Language Interaction Lab @ UIUC

Sep 2024 – Present

Undergraduate Researcher

Champaign, IL

- Integrated NLP techniques to automate the extraction of relevant data from Semantic Scholar, streamlining the analysis of citation patterns across various academic fields.
- Employed an NLP model to analyze citation certainty, extracting and quantifying confidence levels from original research texts to understand how citation impact and discipline-specific factors influence perceived certainty.

STAT/CS/IS 107: Data Science Discovery

Jan 2024 – Present

Course Assistant

Champaign, IL

- Helped manage hands-on lab sessions where students practiced data manipulation and analysis using pandas, reinforcing their understanding of data cleaning and transformation techniques.
- Guided students in creating data visualizations with matplotlib, helping them develop skills in presenting data insights effectively through various plots and charts.
- Provided support during office hours on scikit-learn for machine learning, teaching students basic concepts in machine learning such as clustering and classification to give them an overview of the field.

Arrcus, Inc

Jun 2024 – Aug 2024

Software Engineer Intern

San Jose, CA

- Developed a script to analyze and categorize network device log errors by protocol using pexpect, incorporating the threading library to implement multi-threading for enhanced performance.
- Automated the generation of tailored email reports for effective communication with the Customer Solutions Engineering Team using postfix.
- Identified and tracked error trends to create a dataset for training deep learning algorithms, enabling advanced data analysis of device performance using the regex library.

Projects

FaceCraft: A Face Generator | *Pytorch*

June 2024

- Developed a Generative Adversarial Network (GAN) using PyTorch to generate realistic facial images, training on the CelebA dataset to enhance model accuracy and performance.
- Utilized Matplotlib to visualize generated faces and model training progress, enabling effective evaluation and presentation of the GAN's output quality.

Long Texts Summarizer | *Python, Nltk*

May 2024

- Developed a Flask web application that employs natural language processing (NLP) to summarize text from user-provided URLs and input, utilizing NLTK for tokenization and stopword removal.
- Implemented a summarization algorithm with BeautifulSoup for dynamic web scraping, extracting and condensing key sentences to enhance information clarity.

PickMe: Restaurant Recommender | *React.js, Flask, Matplotlib, scikit-learn*

April 2024

- Engineered a full-stack web application using React.js and Flask, incorporating KMeans clustering to identify top-rate restaurant based on user preferences and integrated it with the Geolocate and Google Places APIs.
- Leveraged TypeScript and MongoDB for robust data management and storage and implemented Google OAuth for secure user authentication.

World Happiness Report Data Visualization | *R*

Feb 2024

- Developed insightful data visualizations using R to illustrate key trends and regional disparities from the World Happiness Report.
- Employed R packages such as ggplot2 to create static visualizations, effectively communicating happiness metrics across various countries.

Coursework

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|---------------------------|----------------------------|--------------------------|-----------------------|
| • Data Structures | • Statistics & Probability | • Computer Systems | Methodologies in C++ |
| • Artificial Intelligence | • Statistical Modeling | • Data Science Discovery | • Software Design Lab |
| • Database Systems | • Discrete Structures | • Programming | |

Technical Skills

Languages: Python, R, Java, C/C++, HTML/CSS, JavaScript, TypeScript

Tools: GitHub, VS Code, Eclipse, Google Colab, PyCharm, Pandas, Pytorch, Django, Flask, React.js, Keras, Tensorflow, NumPy, Matplotlib