

# Student's Name

sne21star.github.io | linkedin.com/in/sneha-mahapatra | smahapatra@umass.edu | +1-978-394-1605

## EDUCATION

**University of Massachusetts, Amherst**  
Masters of Science in Computer Science

Sept 2021 - May 2023

**Purdue University, West Lafayette, IN**  
Bachelors of Science in Computer Engineering

Aug 2017 - May 2020

## EXPERIENCE

**Ford Motors Co. - GDIA**  
Software Engineering, Internship

May 2022 - Aug 2022  
Detroit, MI

- Developed endpoints in Spring Boot for tabled data manipulation
- Wrote SQL queries for data manipulation
- Developed Python Script to call Endpoints
- Designed Mobile Application for Ford vehicles in 2 Day Hackthon Challenge
- Skills Acquired: Spring Boot, Java Development, Hadoop, Pyspark, Python Scripting and Development

**University of Massachusetts, Amherst - BioNLP**  
Application Developer Research Assistant, Research

Sept 2021 - present  
Amherst, MA

- Developed iOS mobile application to help users in poverty find resources and programs to help them in times of need
- Integrated Mapbox software library, and Firebase to help users find tailored resources close to them.
- Designed web crawling programs to find resources and create a database of resources
- Fine tuning BERT NLP model to extract important information from resources to create a tailored experience
- Skills Acquired: iOS mobile development, Firebase, Mapbox, Natural Language Processing

**Purdue University - VAA**  
Application Developer Research Assistant, Research

May 2022 - Aug 2022  
West Lafayette, IN

- Designed and developed a GUI for a research team that tracks turkey for poultry production
- Designed web application with interactive characteristics with an intuitive ui/ux design. It contains 7 interactable components including video data manipulation, 5 statistical graphs, and an animation that traces the turkey's path, and a tab that showcases ML model used to track turkeys
- Abstract for my GUI accepted to Purdue's Undergraduate Research Conference.
- Skills Acquired: Python Development, Web Development, Plotly, UI/UX design, Model Integration

## PROJECTS

**596E: Machine Learning for Child Resue**

Apr 2020 - Jul 2020

Jagath Jai Kumar and Benjamin Glickenhau, UMASS Rescue Lab

[github.com/UMass-Rescue/mobile\\_app](https://github.com/UMass-Rescue/mobile_app) + [/desktop\\_app](#)

- Designed two React-Native Applications that aid law enforcement of different departments to canvas trackers and evidentiary material
- Developed mobile application and desktop application that connects to Fast API backend and MongoDB.
- Skills Acquired: Expo, React-Native, MongoDB, Fast API, Typescript, Javascript

**Senior Design: EPCS 412**

Jul 2020 - Nov 2020

Prof. Nusaybah Abu-Mulaweh, Purdue University

[github.com/sne21star/mediapipe](https://github.com/sne21star/mediapipe)

- Designed and developed a Real Time ASL translator application that uses Computer Vision to translate American Sign Language (ASL) for Senior Design.
- Designed and developed iOS application that integrated Mediapipe and ASL translator ML model. Application integrates a static sign ASL translator tailored to the Indiana Sign Language.
- Fined tuned existing ML Model and integrated it with Google's Mediapipe software framework to interpret the ASL Alphabet.
- This application has nine different categories and also has a dynamic sign translator that can translate phrases in ASL alphabet
- Design Team lead for two semesters
- Skills Acquired: Computer Vision Model Development, iOS Development, Integrating CV ML Model, Management Skills

**Continuous Analysis of Many CAMeras**

Mar 2020 - Aug 2020

Dr. Lu, CAM2

[arxiv.org/abs/2005.09091](https://arxiv.org/abs/2005.09091)

- Research team that revolves around using worldwide cameras and interpret data from the Cameras
- Designed and developed web scraper that could parse different live cameras for information about the public and be used to decipher mask wearing during COVID-19 pandemic.

## TEACHING

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### Ideas to Innovation I and II (ENGR 131 and ENGR 132)

Jan 2018-May2018

Purdue University

- Taught MATLAB excel macros
- Project Description 2

### Advanced C Programming (ECE 264)

Aug 2018 - May 2019

Purdue University

- Taught concepts in C and guided students with tools such as valgrind and gdb for debugging purpose
- Project Description 2

### Python for Data Science (ECE 20875)

Jan 2020 - Dec 2020

Purdue University

- Taught data Science concepts, introduction to machine learning, and extensive understanding of how to use python and its libraries

## TECHNICAL SKILLS

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**Programming languages:** Python, Java, C, C++

**ML/AI:** Pytorch, Numpy, Pandas, Matplotlib

**Web Technologies:** HTML, JavaScript, Typescript

**Miscellaneous:** SQL, Git, Windows, Firebase, Mongo

## RELEVANT COURSEWORK

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**Machine Learning:** Neural Networks, Machine Learning, Artificial Intelligence, Python for Data Science

**Software:** Advanced Algorithms, Software Theory, Object Oriented Programming

## PUBLICATIONS

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Shengtai Ju, Sneha Mahapatra. *Turkey Behavior Identification System with a GUI using Deep Learning and Video Analytics. IS&T Electronic Imaging*, 2020.

Isha Ghodgaonkar, Abhinav Goel, Fischer Bordwell, Caleb Tung, Sara Aghajanzadeh, Noah Curran, Ryan Chen, Kaiwen Yu, Sneha Mahapatra, Vishnu Banna, Gore Kao, Kate Lee, Xiao Hu, Nick Eliopolous, Akhil Chinnakotla, Damini Rijhwani, Ashley Kim, Aditya Chakraborty, Mark Daniel Ward, Yung-Hsiang Lu, George K. Thiruvathukal. *Observing Responses to the COVID-19 Pandemic using Worldwide Network Cameras. 2020.*

## ABSTRACTS

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Sneha Mahapatra, Huan-Yuan Chen, Professor Hong Yu. NLP and Annie App for Social Determinants of Health. AMIA 2022 Clinical Informatics Conference May 24-26; Houston TX.

## ACHIEVEMENTS

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<b>Scholarship</b>	RCA Zworykin	2020
<b>Scholarship</b>	McDonnell Douglas Minority and Women	2020
<b>Honor Society</b>	Alpha Lambda Delta Phi Eta Sigma	2018