Nitish Poddar

+1 (217)-721-9333 | npoddar2@illinois.edu | nitishpoddar.com | github.com/nitishp1812 | linkedin.com/in/nitish-poddar

EDUCATION

University of Illinois at Urbana - Champaign   Champaign-Urbana, IL
*B.S. in **Computer Science**, Minor in **Economics***   *May 2022*
GPA: 3.96 / 4.0, James Scholar Honor's Student
Coursework: Machine Learning, Artificial Intelligence, Internet of Things*, Algorithms, Real-Time Systems*, Systems Programming*, Data Structures, Computer Architecture, Applied Linear Algebra, Intro to Econometrics, Economic Statistics

EXPERIENCE

Cargill | Incoming Software Engineering Intern   Champaign-Urbana, IL | **Starting Aug 2020**

Panasonic | Software Development Intern   Champaign-Urbana, IL | **Jun 2020 - Aug 2020**
- Worked as part of an Illinois Business Consulting (IBC) team for Panasonic in an Agile development process.
- Developed a chatbot with **Python**, **Rasa**, **React.js** and **MongoDB** which uses Natural Language Understanding (NLU) pipelines to understand and answer questions based on information extracted from PDFs.
- Created a production-ready real-time data processing pipeline to process and manipulate data with **Python** and **Pandas**.
- Designed and deployed an interactive dashboard to display output from the pipeline using **Docker**, **PostgreSQL** and **Grafana**.

Koyejo Lab | Research Assistant   Champaign-Urbana, IL | **Jun 2020 - Present**
- Collaborating on an agent for automated theorem proving in Professor Sanmi Koyejo's research group.
- Designing and implementing the neural network for the theorem-proving agent using **Python** with **PyTorch**.
- Creating a dataset using language parsers and programming language compilers to train the agent on.

Forward Data Lab | Research Assistant   Champaign-Urbana, IL | **Jun 2020 - Present**
- Working as part the team developing **ListenOnline**, an app which allows users to collect and analyze data from social media.
- Developed a dashboard and file manager as part of an internal tool using **React.js**, **Node.js**, **Express.js** and **MongoDB**.
- Creating a tool to generate **GraphQL** schemas from **Swagger** API descriptions with **Node.js**.

TIMAN Group | Research Assistant   Champaign-Urbana, IL | **Aug 2019 - May 2020**
- Worked with Professor Cheng Zhai on **UCAIR**, a user-centered personalized search engine.
- Redesigned the app to use a modern server-client infrastructure using **Java** and the **Spring** framework.
- Refocused the search engine to focus on the literature search domain for academia by using concepts from Natural Language Processing (NLP) and information retrieval.

Supertron Infotech | Software Development Intern   Kolkata, India | **Jun 2019 - Aug 2019**
- Built an interactive bot used by 5000+ people to aid prospective students through a local university's admissions process.
- Developed the complete user interface, API and database for the bot using **React.js**, **Node.js**, **Express.js** and **MongoDB**.
- Incorporated different conversation flows to allow the user access to information in an easy and interactive manner.

PROJECTS

Gesture Recognition App   *github.com/nitishp1812/gesture-recognition*
- Created a web-app to recognize American Sign Language (ASL) gestures and display them on the screen.
- Implemented a convolutional neural net in **Python** with **Keras** along with **OpenCV** for image processing to extract and predict hand gestures from device camera video.

Data Compression CLI   *github.com/nitishp1812/data-compression*
- Designed an app with a Command-Line Interface (CLI) to compress and decompress text files with various algorithms.
- Incorporated knowledge of advanced data structures and algorithms to implement algorithms like Huffman coding and Arithmetic coding using **C++**.

SKILLS

- **Languages**: Python, JavaScript, C/C++, Golang, Java, R, HTML, CSS, MongoDB, PostgreSQL, MySQL, Solidity
- **Frameworks**: Flask, PyTorch, Tensorflow, Keras, OpenCV, Pandas, scikit-learn, Node.js, React.js, Express.js, React Native, Spring, Android
- **Technologies**: AWS, Docker, Git, UNIX, REST, Websockets, GraphQL, XMPP, Ethereum, LaTeX, Swagger, Grafana

ORGANIZATIONS

ACM @ UIUC | Member, SIG Blockchain
- Explored the concepts of blockchains and immutable ledgers by attending regular meetings and contributing to projects.
- Developing a supply chain simulator as part of team with **Solidity** on the **Ethereum** blockchain.