# Sahil Joshi

庵 www.sahiljoshi.com | 🔀 sahiljoshi759@gmail.com | 🖸 github.com/sahiljoshi515 | 🛅 linkedin.com/in/sahiljoshi515 | 📱 (469) 465-3735

#### Education\_

# **University of Massachusetts Amherst**

# **BACHELOR OF SCIENCE IN COMPUTER SCIENCE & MATHEMATICS**

GPA: 4.0 | Commonwealth Honors College | Chancellor's Scholarship | Dean's List

Related Coursework: Data Structures & Algorithms, Computer Systems Principles, Introduction to Computation, Scientific
Computing, Probability & Statistics, Python Bootcamp (Udemy), IOS App Development (Udemy), Web Development (Udemy)

#### Skills\_

**Programming:** Java, JavaScript, Swift, Python, C, HTML/CSS, React.js, Node.js, LaTeX, SQL, Git, REST API, Shell Script, MATLAB **Development:** GitHub, Firebase, Heroku, Bootstrap, Realm, MongoDB, VS Code, Atom, Eclipse, Arduino, Trello, Agile, Scrum **Languages:** English, German, Marathi, Hindi

#### Experience\_

Research Assistant Remote

### **NLP tasks with Language Models**

Jul 2020 - Aug 2020

- Conducted research on Language Models under the guidance of a PhD student at UMass.
- Focused on BERT and N-gram language models to study and understand their behavior.
- Wrote an evaluations paper on the different techniques used by Language Models.

# Frontend Developer at College of Information and Computer Sciences Project ReachOUT

Remote

Expected Date of Graduation: May 2023

Jun 2020 – Aug 2020

- ReachOUT is a web application, which will be used by students for scheduling appointments with academic professionals.
- Designed the UI of the web application in collaboration with a scrum team of 8 members using React.js.
- Prepared software for beta testing for the alumni in fall 2020.
- Attended standups twice a week and used GitHub and Trello in an Agile environment.

#### **Undergraduate Course Assistant**

Amherst, MA

# Data Structures & Algorithms, Programming with Java

Jan 2020 - Present

- Conduct office hours to answer students' questions and help them strengthen their concepts about data structures.
- Debug and grade students' projects and provide relevant comments and other feedback to further students' skills and improve future work.

### Intern at VASP SOLUTIONS LLP

Pune, India

#### **Software Trainee**

May 2019 – Jul 2019

- Solved several coding problems to achieve proficiency in Java.
- Learned IOS App Development. Made user-defined manuals for several applications in Word.
- Adapted to working with different people while working on the same project.

#### Projects\_

### To-Do-List Web App

- Used Embedded JavaScript for the frontend and Node.js along with MongoDB for the backend.
- You can create different categories/pages by adding the name of the category you wish to create as the new endpoint.

## **Simon Game** (sahiljoshi515.github.io/Simon-Game/)

- Built a memory game in which you need to keep track of the previous pattern and click on the next color which flashes on the screen.
- Used JavaScript and JQuery to achieve the functionality.

# **Arduino Projects**

- **Liquid Temperature Measurement** using DS18B20: Wrote C++ scripts to modify the voltage received and converted it to a suitable temperature in degree Celsius. This answered my Science question: Which liquid cools faster?
- **Light Sensing Device** using an LED: Wrote C++ scripts to build this tool. The LED goes off when lights are turned ON and it turns on when lights are Turned OFF.

#### **Guess The Flower**

• Used the CoreML framework to build this application in XCode. It takes an image of a flower as the input and gives the name as the output based on the Inception v3 Model. Wrote this program in Swift.

# **Text-Based Games using Python**

- **Tic-Tac-Toe**: Used Arrays for positioning and Loops for functionality, which can be played in a command-line.
- Black-Jack: Implemented Object-Oriented Programming to build this game, which can be played in a command-line.

### **Analytics**

- Wrote a source code in Python which gathers information about COVID-19 crisis based on the country code you enter.
- Converted the data received from a third-party API into a .csv file using the Pandas library, which makes it more readable for the user.