HIMANSHU HANSARIA

📞 812-349-8278 Bloomington, IN, 47401 ✉ hhansar@iu.edu 🔗 linkedin.com/in/himanshuhansaria Github

Education

Indiana University Bloomington   **Aug. 2021 – May 2023**
Master of Science in Data Science   *Bloomington, IN*

BITS Pilani, Pilani   **Aug. 2011 – May 2016**
MSc.(Hons.) Physics, B.E.(Hons.) Manufacturing   *Pilani, India*

Relevant Coursework

- Applied Algorithms
- Elements of AI
- Computer Vision
- Machine Learning
- Statistics
- Data Visualization
- Advanced Database Concepts

Skills and Technologies

Python,C,C++,Javascript,R,Java,Tensorflow,Scikit-Learn,ReactNative,React,Matlab,OpenCV,SQL,Linux,Git,GCP,AWS, RESTful APIs,MongoDB,Jupyter Notebook,Agile,Docker,Windows,Linux/Unix, Kinect SDK, Apache Flink, Bootstrap

Experience

Google Summer of Code (The Apache Software Foundation)   **Jun 2022 – Sep 2022**
Software Engineer Intern   *Bloomington, USA*
- Designed and developed a full stack web application for spawning multi-user jupyterhub environments capturing the absolute state of the Jupyter notebooks using React,Flask and MySQL.
- Designed a custom spawner that submits Slurm jobs to spawn Jupyter Notebooks in docker containers.

Indiana University Bloomington, IN   **Aug 2022 – Present**
Associate Instructor   *Bloomington, USA*
- Mentored students' projects & graded homework for Elements of AI (Fall 22) & Introduction to AI (Spring 23)

Research Assistant   **(Jan 2023 – Present)** *Bloomington, USA*
- Developed generative and contrastive models to explore the curriculum visual representation development in egocentric vision of infants using deep learning based self supervised methods in HuggingFace and PyTorch

Infostreamz Private Ltd.   **Jun 2019 – Mar 2021**
Machine Learning Engineer   *Delhi, India*
- Developed an application for COVID-19 mask detection with 93% prediction accuracy using OpenCV and Tensorflow

HSBC   **Jun 2016 – Apr 2019**
Software Engineer   *Pune, India*
- Improved staffing efficiency by 70% by developing Roster Automation Algorithm and Tool based on the time series forecasted for work hours demanded at the Global Help Desk using R.
- Developed a Customer Segmentation visualization dashboard on the basis of categories of securities invested, enhancing cross-sell and upsell of products by 40% using Python and Javascript
- Automated KYC using Distributed Ledger Technology, Google Cloud API and Face++ and RESTful APIs.

Housing.com   **May 2014 – Jul 2014**
Image Processing Intern   *Mumbai, India*
- Undertook relevant research work and automated the construction of 3d Architectural Models from 2d Floor Plans using OpenCV and C++.

Course/Personal Projects

AI Based Combinatorial optimization | *Python, numpy*   **Aug 2021 – Sep 2021**
- Developed a program to create team groupings based on individual preferences to minimize the time taken for evaluation of the Assignments using simulated annealing local search.

V-Braille | *C# , Kinect SDK*   **Apr 2014 – Mar 2015**
- Implemented a pattern recognizing typing interface application to improve computer accessibility by 70% to blind people by using Kinect. Secured 1st position at Microsoft Code Fun Do among hundreds of participants.

Human Activity Recognition using Kinect | *C++, Kinect SDK*   **Aug 2014 – May 2014**
- Achieved 90% accuracy in recognizing human activities like clapping, jumping, kicking etc. using Kinect.
- Research project under the guidance of Dr.J.L.Raheja, Senior Principal Scientist (Machine Vision),CEERI, CSIR

Leadership / Extracurricular

Data Science Club   **Spring 2021 – Fall 2022**
Director of Technical Development   *Indiana University Bloomington*

Team AcYut   **Aug 2011 – Aug 2012**
Represented India at Robocup Iran Open for Humanoid Robotics (R&D in Bipedal locomotion)   *Tehran, Iran*