SEEMANDHAR JAIN

← +1 4086908037 | M seemandharj@gmail.com | 图 | □ © 0000-0002-4176-3595 http://seemandharjain.web.illinois.edu/

EDUCATION

• University of Illinois Urbana-Champaign (Siebel Scholar, Class of 2024) Master of Science (M.S.) in Computer Science; GPA: 3.92/4 (Fully Funded)

Il, USA Aug 2022 - May 2024

• IIT Indore Bachelor of Technology in Computer Science and Engineering; GPA: 3.6/4 Minor in Humanities and Social Sciences; GPA: 3.6/4

Indore, India July 2017 - May 2021

SKILLS

Programming Languages: Python, Java, Apex, Swift, HTML, CSS, C/C++, R, Android, Arduino, SQL/SOQL, Matlab. Tools and Web Technologies: Django, Flask, AWS, Angular, React, Docker, Tableau, Mulesoft, J2EE, Bootstrap, PHP, Scilab, Git. Research Skills and Technologies: Artificial Intelligence, Computer Vision, PyTorch, TensorFlow, Deep Learning, Azure, Kubernetes.

WORK EXPERIENCE

• University of Illinois Urbana-Champaign, IL, USA, Graduate Research Assistant under Dr.David Forsyth

Aug 2022 - Present

- o Collaborated with Dr. David Forsyth on Blocks2World, a two-step method for 3D scene rendering and editing using Diffusion models.
- Researching the use of Control Knobs in Diffusion Models to enhance real-time intrinsic image decomposition.

Head Teaching Assistant for CS 225 (Data Structure and Algorithms), CS 128 (Intro to CS), and CS 411 (Database systems).

HealthAlgnite (link)

CEO, Founder and Managing Director

Jan 2022 - Present

- Founded and currently manages Health Algnite, a leading healthcare AI consulting company focusing computer vision technologies.
- Established partnerships with key healthcare institutions and MedTech companies, accelerating the adoption of AI solutions.
- DOCOMO Innovations, Inc. Research Intern

California, USA May 2023 - August 2023

- Working on the development of a GPT2-based realtabformer model to fill missing data in datasets, improving model prediction.
- Working on the development of a practical stereo depth system for videos, focusing on improving 3D depth perception.
- Stable Diffusion based Ad generation, using mask-based inpainting utilizing LaMa with fine-tuned diffusion model on specific data.
- Salesforce

Hyderabad, India July 2021 - August 2022

AMTS Software Developer

- Worked as a software developer in the CnP team, focusing on the development of Salesforce Products and Einstein AI.
- Implemented tax schema for EMEA region and performed full-stack development for feature enhancement on the Force.com platform.
- Automated core patch regression processes and deployed APIs using Mulesoft and Heroku, resulting in significant time saving.
- Served as a Scrum Master, leading the major release of the FnE product that added numerous new features for customers.
- University of Alberta, Canada

Research Assistant under Dr. Abhishek Srivastava and Dr. Osmar Zaiane,

Jan 2019 - April 2021

- o Designed an automated surveillance system using ML models that utilize wireless sensor networks for detecting forest fires.
- Implemented a two-tier anomaly detection algorithm to identify and predict adverse conditions from health parameter readings.

SELECTED PUBLICATIONS

- Frustratingly Simple Convex Primitives from Real Images. V. Vavilala, S. Jain, D. Forsyth. CVPR, 2024. [Under Review]
- Blocks2World: Controlling Realistic Scenes with Editable Primitives. V. Vavilala, S. Jain, R. Vasanth, A. Bhattad, D. Forsyth. CVPR, 2024. DOI: 10.48550/arXiv.2307.03847. [link]
- An Energy Efficient Fault-Anomaly Detection in Wireless Body Area Networks. S. Jain, P. Jain, PK. Upadhyay, JM. Moualeu, A. Srivastava. ACM Transactions on Computing for Healthcare, 2022. DOI: 10.1145/3501773. [link]
- Anomaly Detection in Resource Constrained Environments with Streaming Data. P. Jain, S. Jain, OR. Zaane, A. Srivastava. IEEE Transactions on Emerging Topics in Computational Intelligence, 2021. DOI: 10.1109/TETCI.2021.3070660. [link]

ACHIEVEMENTS

- Selected as a **Siebel Scholar**, Class of 2024 by Siebel foundation from UIUC.
- Interviewed by **Times of India** news for research on wildfire detection algorithm (2022).
- Qualified for Onsite Round of ACM ICPC 2019 and received honorable mention in ICPC Amritapuri regionals.
- Secured All India Rank 1st in IIT JEE Advanced (2017) in Mathematics Section with a score 122/122.
- Secured State rank 2 and International rank 26 in International Mathematics Olympiad (2015).