SANCHITA KAMATH

STUDENT RESEARCHER

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in sanchitakamath

Becoming an avid Researcher, aiming to include accessibility and inclusivity in software design and in life, exploring the field of Human Computer Interaction and Artificial Intelligence. Aspiring to be diligent, empathetic, and communicative, by gaining multi-disciplinary, collective intelligence through capstones, insightful Academic and Industrial Internships & Research Service positions.

EDUCATION HISTORY

B.Tech Computer Science and Engineering September '19 - July '23

Manipal Academy of Higher Education - Dubai Campus, UAE

Top 3 in class. GPA: 9.86, 9.91, 9.83, 9.67, 9.86, 9.5/10 (1st ~ 6th semesters respectively).

Advisor: Dr. Sophia Rahaman.

MicroMasters in Statistics and Data Science
August '20 -Present

MITx - Massachusetts Institute of Technology, USA for edX

Completed Modules:

- 6.86x Machine Learning with Python: from Linear Models to Deep Learning;
- 6.431x Probability The Science of Uncertainty and Data.

RESEARCH EXPERIENCE AND POSITIONS

Research InternJuly '22 - September '22

In the OpenUAE Research Group, University of Sharjah, UAE

- Digital Twins in the sector of Aviation: Conducted a Systematic Literature Review, focus concentrated on Safety and Maintenance by accessing approximately 80 research papers to define the concept, and provide suggestions for Digital Development to the General Civil Aviation Authority of the United Arab Emirates.
- Robotic Process Automation: Developed a Trading Algorithm by working on mapping event space to the state space to allow for Reinforcement Learning (RL) in order to automate FOREX Trading. Further defined potential evaluation metrics between user set parametric algorithms and the proposed RL Algorithm to determine optimal implementation standards.
- Teaching Assistant
 April '22 -Present

Manipal Academy of Higher Education Dubai Campus, UAE

- Conducted Relational DataBase Management System (RDMS) Course Lab under the guidance of Dr. Sophia Rahaman, Program Director, CSE and IT Department for forty-six students.
- Assisting in MTech Thesis Project in Blockchain by helping out in ironing the
- UX Researcher July '21 -Present

Pucho.inc

- Conducted Qualitative Personae Creation for financially unsound demographic to articulate struggles and reflections as insight to designing.
- $\bullet \ \ \text{Lead the interface design for language-barrier removal for pan-India Trials.}$
- Responsible for including inclusivity and accessibility by developing Voice User Interfaces (VUI) to cater to the blind and visually impaired.

PUBLICATIONS AND PRESENTATIONS

JOURNAL ARTICLES

Dubey S., Subramanian G., Shukla V., Dwivedi A., Puri K., **Kamath S.**, "Blockchain technology: a solution to address the challenges faced by the international travellers", OPSEARCH, Springer, July 2022, doi: 10.1007/s12597-022-00597-x.

PEER-REVIEWED CONFERENCE ORAL & POSTER PRESENTATIONS

Kamath S., "Science Fiction Prototyping In English as a Design Thinking Tool to Inspire the Future", 4th Applied Linguistics and Language Teaching International Conference, March 2022, can view presentation here, manuscript accepted - to be published in October 2022.

Kamath S., Rahaman S., "Engagement of Senior Citizens in a Family Setting to Help Revive Dignity: A Study", 8th International Conference on Information and Communication Technologies for Ageing Well and e-Health, January 2022, doi: 10.5220/0011074800003188.

Kamath S., "AFFORENCY: Medicine Distribution and Protection Automation implemented through Blockchain: Supported by Artificial Intelligence", International Blockchain Olympiad (IBCOL), Solution Challenge, October 2021, whitepaper

Kamath S., "Active and Participatory User Contribution to Inclusive Design for Net Zero Homes in UAE", ZEMCH Inteternational Conference Proceedings, ISSN 2652-2926

Kamath S., Martin A., "HVAC Systems", ASHRAE, Poster Competition, Team Res Novae

VOLUNTEERING AND ACADEMIC SERVICE

WTM Ambassador
June '22 - Present

Google Women Techmakers, Google (MENA & Global)

- · Mentoring female students through face-to-face interaction to reduce gender gap in the technological industry.
- · Organising sessions and events for industry guidance to students for their professional development.

GDSC Mentor June '22 - June '23

Google Developer Student Club, MAHE - Dubai Campus

- Acting as mentor to the GDSC '22 Lead for MAHE Dubai Campus for leading the club.
- Organizng Study sessions, events and workshops to provide a platform for students to be a part of technological advancement.

GDSC Lead

June '21 - June '22

Google Developer Student Club, MAHE - Dubai Campus

- Delegating and managing tasks throug collaboration to ensure promotion of the Club, as a Founding Member of GDSC MAHE-Dubai Campus.
- · Academia: Instantiated Community Service Pedagogically by helping other students within the university, learn.

Student Outreach Manager September '20 - June '21

Society of Innovators and Entrepreneurs, MAHE (SIE)

- Part of the Core Team, rsponsible for organising Industry Mentorship Programs.
- Increasing Student awareness for the club and Content writing for its social media pages.

SUMMER INTERNSHIPS

UX Engineer and DesignerJune '22 - September '22

Sentient Labs

- · Responsible for research on Unmanned Surface Vehicles, articulating its need and Design Requirements.
- Conducted Usability Testing.

Student Brand Ambassador May '20 - August '20

Ojo

- Completing tasks and conducting User Research by interviewing students of varied ages, to improve the platform's impact.
- Created a user-centered business model as a group project, by understanding business needs and future goals, to help manage the furthering of the start-up towards its goal.

PROJECTS

Autistic Education Study

April '22 - Present

- Creating a learning, fine motor skills, and ethics and behaviour learning application for autistic children.
- Conducted User Research and SLR for current methods employed for autistic learning.

Smart Home

March '22 - Present

- Developing IOT-based Project, showing innovative and accessible solutions towards sustainable living.
- Started creation of a guidance robot for the blind and visually impaired.

OctaBin

March '22 - Present

- Lead the team in Application Development.
- Defined the workflow and features of the application to create a easily handled user interface.

M. Hostels

December '21 - Present

- Developed a Dynamic Pricing Algorithm through parametric articulation to set prices for rooms based on time, date and nature of booking.
- Created Digital Wireframes and High-Fidelity Prototypes which helped initiate development.

AI-Based Natural Disaster Analysis System

July '21 -October '21 (received BEST PROJECT title)

• Created flask application/CNN model for image analysis and comparison with a database to predict presence of a natural disaster.

ViBrain

June '21 - August '21

• Conducted research for a device for the deaf using bone conduction technology, to reduce a gap in lifestyle.

Optima

April '21 - June '21

- Defined the concept for interface design and created Digital Prototypes.
- Responsible for including accessibility features into design for the deaf/blind/visually impaired.

Sustainable Housing

September '19 - December '19

Created floor plans for housing using ancient Indian science called "vastu".

SELECTED CERTIFICATIONS AND MEMBERSHIPS

UX DesignMarch '21 - Present

Google / Coursera

Completed 5/7 courses.

Several Certificates issued

August '19 - Present

Interaction Design Foundation (IxDF), Denmark

- Top 1% Learner accomplishment.
- Completed Foundation, Beginner, Intermediate & Advanced Courses in UX/UI and HCI.

SPECIALIZATIONS AND WORKSHOPS

Strategic Business Analytics (2020-2021)

ESSEC Business School, UK / Coursera

Mathematics for Machine Learning (2019-2020)

Imperial College London, UK / Coursera

Human Resource Management (2019-2020)

Macquarie Business School, Australia / Coursera

Workshop on 3D Printing for Engineering Projects (2019-2020)

Workshop on 3D Printing for Engineering Projects/IEEE Robotics and Automation Society