Swasti Khurana

in https://www.linkedin.com/in/swasti-khurana-20171316b/

https://medium.com/@swastikhurana0800

 ${\color{red} \, {\boxtimes} \,} \,\, swastikhurana 0800 @gmail.com$

• https://github.com/SwastiKh/

EDUCATION

IIIT Vadodara Gandhinagar, India

B. Tech in Information Technology Expected July 2022

CPI: 8.83/10

Maharaja Sawai Man Singh Vidyalaya

Higher Secondary School (94.4%)

Jaipur, India March 2018

SKILLS

Computer Languages Python, R, SQL, C/C++, Java, Javascript **Tools** LaTeX, Git, Colab, Jupyter, Visual Studio Code

Softwares Tableau, Wireshark, HashSuite, Nmap, Selenium, Archimate, MySQL Framework & Libraries Numpy, Pandas, ROS, PyTorch, Scikit Learn, Matplotlib, Django

Soft Skills Leadership, Time Management, Teamwork, Interpersonal skills, Persistence

PUBLICATIONS

Infographics Wizard: Flexible Infographics Authoring and Design Exploration

EuroVis 2022

o Worked on a research paper publication with a PhD student, Anjul Tyagi and his supervisor (Prof Klaus Mueller) in Stony Brook University. The paper is based on Computer Vision and Visualization, specifically Infographics generation.

o Responsibilities include creating an interface, testing models, exploring codes from papers to reuse, writing a section etc.

Paper submission in IEEE Transactions in Service Computing Journal

Submitted for Review

o Collaborated with Prof. Aditya Ghose (University of Wollongong), Dr. Novarun Deb (Indian Institute of Information Technology, Vadodara), and Dr. Sajib Mistry (Curtin University) for a novel service area modeled for a Crowdsourced IoT Service market.

EXPERIENCE

Multi-Agent Robotic Motion Lab, National University of Singapore (NUS)

Singapore

Research intern with Prof. Guillaume Sartoretti

January 2022 - Present

- o Communications Learning in Multi-agent Reinforcement Learning
- o Developing algorithms on Pytorch framework

Algorithms to Architecture Lab, IIIT Delhi

Delhi, India

Research intern with Prof. Sumit Darak

May 2021 - July 2021

- o Multi-player multi-arm bandit algorithms.
- o Aggregator algorithm for the above mentioned algorithms.

Clique and WTM Ahmedabad (Link to Certificate)

Ahmedabad, India

Exploratory Data Analysis Research Intern

December 2020 - January 2021

o Mentors Dhwani Mehta and Sahaj Vaidya guided to help learn and explore the field of Exploratory Data analysis with Python and Tableau, published a blog on Medium.

Clique (Link to Certificate)

Ahmedabad, India

Reinforcement Learning Research Intern

June 2020 - July 2020

o Worked with Dhwani Mehta and Bansi Gajera as mentors to learn and explore the field of Reinforcement Learning, published two blogs on Medium.

PROJECTS

Healthcare System

April 2020 - Present

- o Build models and views in Django.
- o Learn and work on connecting APIs.

Learning Linear Algebra through new Lights

July 2020 - December 2020

- o Using the concept of Linear Algebra, formulated a game (in React) similar to, yet different from the traditional Lights-out.
- o It also discusses rings and how they are related to solving graphs in Lights-out.

CERTIFICATION COURSES

AWS Machine Learning Foundations (Link to Certificate)

Udacity

- o Learn the fundamentals of machine learning and object-oriented programming best practices
- Learn computer vision with AWS DeepLens, reinforcement learning with AWS DeepRacer, and generative AI with AWS Deep-Composer.

Intro to Machine Learning (Link to Certificate)

Kaggle

o Learn core ideas in machine learning, and build our first models.

NVIDIA DLI Fundamentals of Deep Learning (Link to Certificate)

NVIDIA DLI

o Learn the fundamental techniques and tools with common deep learning data types and model architectures. Explore concepts of data augmentation and transfer learning.

Cryptography: Coursera Certification (Link to Certificate)

University of Maryland on Coursera

o Introduction to modern cryptography, with an eye toward practical applications.

Usable Security: Coursera Certification (Link to Certificate)

University of Maryland on Coursera

o Focus on how to design and build secure systems with a human-centric focus. It looked at basic principles of human-computer interaction, and how to apply these insights to the design of secure systems.

Ethical Hacking (Link to Certificate)

Internshala Trainings

o Basics of Information Security, Computer Networking, Web Development, Information Gathering and VAPT of vulnerabilities, Documenting and Reporting Vulnerabilities.

Cyber Security Technologies (Link to Certificate)

Career Nourishers

o OS Security, Password Cracking, Identity Theft, Malware, Worms, Key Loggers, Spyware, DDOS, Ransomware, DNS Filtering, SQL Injection, Cross Site Scripting, Firewalls, IDS & IPS, SIEM, Incident Response Plan, Cyber Forensic & Digital Evidence.

WRITINGS

Blogs:

- o Exploitation and Exploration in RL (Link)
- o TD-Gammon Algorithm (Link)
- o Super Store Data Analytics and Visualization (Link)

Chapters:

o Public key cryptography (Link)

ACHIEVEMENTS AND EXTRA-CURRICULAR

Honors and Awards:

- o GHC (Grace Hopper Celebration) 2021 Student Scholarship recipient by AnitaB.org (Link to Certificate)
- o Secured 4th position in AWS DeepRacer Women's League India 2021. (Link to Certificate)
- o Reveiwer for a paper in IROS 2022.
- o Best Idea in HackIIITV, 2018 (Link to Certificate)
- o Winner of Hired event in Cerebro 2021 The technical festival of IIITV
- o Secured third position in Travel photography in Synapse 2021, by DAIICT (Link to Certificate)
- o Silver medalist in 3000m race at Inter IIIT Sports meet, 2020 (Link to Certificate)

Extra-Curricular:

- o Weekly volunteer at Sikh Temple (January 2022 Present)
- o Participant in Letters to a Pre-Scientist (science outreach) and awarded for Exceptionally Engaging Letters (Link to Certificate)
- o Basketball Silver medal in Inter-College Games (ICG) at NUS.
- o Mentor of Obscura Photography club of IIITV
- o Completed 30 days of Google Cloud Program (Link to Certificate)
- o Member of core committee with Clique for 4th edition
- o Problem-setter and member of Enigma- Mathematics Club of IIITV
- o Core member of MOD5 Dance club of IIITV
- o Core member of Masquerade- Drama club of IIITV
- o Participant of Carrom, TT and Athletics in Inter IIIT Sports meet, 2020
- o Event organizer of Penumbera in Institute's Technical Fest (Cerebro 2019)