

Soumya Purohit

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669.264.7027

SKILLS:	Platforms:	Windows, Linux, OSX, GENI, OpenStack, AWS
	Programming Languages:	Java, Javascript, Python, C++, SQL, MATLAB, Shell Scripting
	Frameworks:	ReactJs, Hibernate, Spring, Tempest, Tornado, Flask
	Databases:	MySQL, Oracle
	Web Technologies:	Servlets, JSP, HTML, CSS, XML, JavaScript, Ajax
		Blockchain, Algorithms, Machine learning, Web development, OOP, Networks, Data Structures
	Tools:	Eclipse, NetBeans, Jupyter Notebook, PyCharm, Jira, Jenkins, Gerrit
	Version Control Systems:	Git

RELATED EXPERIENCE:

Internship Experience:

CUASHI

Cambridge, MA

Summer Intern

June 2020 - Aug 2020

- Worked on a web application and JupyterServer extension that allows easy management of files in a shared JupyterHub server and/or local JupyterHub server to sync changes using a drag and drop interface.
- Utilized React Js, Python to create an efficient application that syncs the changes from server to local using md5 checksum and REST calls that provides a user friendly interface to view synced status

AT&T

St. Louis, MO

Student Intern - Technical I

June 2019 – Aug 2019

- Contributed to the upstream master branch of the OpenStack *Tempest* project by resolving bug in the OpenStack community by *adding assert statements for volume pagination test to get passed*
<https://review.opendev.org/#/c/674869/>
- Contributed to the downstream master branch of company by adding a YAPF failure message for tox errors
- Created a wiki page on *How to debug Tempest Test using PyCharm*
- Volunteered for Project Make-It and taught microcontroller coding to high school students

Conference Presenter:

April 2019

- Presented ongoing project of Blockchain for threat Intelligence Sharing in Blockchain KC Conference, Kansas City

Research Assistant

University of Missouri (VIMAN Lab)

Aug 2018-Present

- Working on Blockchain based cooperative Threat Intelligence sharing with Incentives to incorporate a trust-based mechanism among Application Users/Providers by using Hyperledger Composer
- Designed and Implemented a dynamic web application using Flask, SQLAlchemy and sqlite3 with Hyperledger Composer and deployed in GENI cloud to allow researchers access health records in secured, transparent and immutable manner
- Worked and published a paper on Honest brokering for computation/data access with policy compliance and high-speed transactions in protected environment by incorporating AI techniques
Valluripally, S., Raju, M., Calyam, P., Lemus, M., Purohit, S., Mosa, A., & Joshi, T. (2019). Increasing protected data accessibility for age-related cataract research using a semi-automated honest broker. *Journal for Modeling in Ophthalmology*, 2(3), 115-132.
<https://www.modeling-ophthalmology.com/index.php/JMO/article/view/102>
- Conducted Interviews round for Research Undergraduate Program funded by NSF
- Collaborated with a team of Neurologist and worked on Neuron Use case using JupyterHub and deployed it on NSF(National Science Foundation) Engineering Cloud
- Collaborated with a team of Biologist and Implemented and evaluated their use case using Jupyter notebook

- Dockerizing existing infrastructure, to improve the lab exercise.
- Contributed to the successful introduction of cybersecurity labs in the course curriculum and performed testing of 4 cybersecurity labs focusing on DDoS, APT and APM attacks in a real test environment
- Created a demo video and hosted on Cyneuro web portal to guide neurologist, biologist and students with implementation of Jupyter Notebook on their Use cases.

Laboratory Teaching Assistant

University of Missouri(VIMAN Lab)

Jan 2019-Present

- Conducted recitation and lecture. Including presenting problem solutions to students, leading student problem solving sessions
- Received overwhelming appreciation from students for creating an effective learning experience that was enjoyable and motivating
- Collaborated with the neuroscience TA to effectively and efficiently contribute neuroscience students in Cyber Infrastructure.

Ypsilon IT Solutions, PVT. Ltd, Indore, India

Jan 2018-June 2018

(Trainee Engineer)

- Implemented a social networking platform that allow users to form networks in social as well as professional environment.
- Designed and Developed UI using Ajax, CSS, JavaScript.
- Implemented Spring MVC framework using Java with the help of core technologies like dependency injection and validation in an Agile environment.
- Performed Hibernate ORM to generate independent queries in the back end.

EDUCATION: University of Missouri, Columbia, MO

GPA- 3.36 Master of Science in Computer Science, August 2018

Banasthali University, Rajasthan India

GPA- 3.75 Bachelor of Technology in Information Technology, July 2018

RECOGNITIONS:

Took part in various debates and extempore competition during University
Hosted many University programs as a lead anchor.