

AMAN HARSH

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EDUCATION

Master of Science, University at Buffalo, The State University of New York

Aug 2021 – Dec 2022

Computer Science and Engineering

Bachelor of Technology, Manipal Institute of Technology, India

Jul 2012 - Nov 2016

Computer Science and Engineering

SKILLS & TOOLS

Functional: REST API, MVC Architecture, Object Oriented Design, Reactive Programming, Agile Methodologies

Technologies: Java/J2EE, Golang, Python, Spring MVC, Spring Boot, RxJava2, Retrofit, JavaScript, Apache SOLR, AWS, JPA, JSON, HTML/CSS, Groovy, Gradle, Apache Maven

Database: PostgreSQL, MySQL, MongoDB, CockroachDB

Tools: Git, Postman, Swagger, Grafana UI, InfluxDB, Hashicorp Vault, Jenkins, Splunk, Docker, SonarQube

Certified Courses: Machine Learning using Python in Data Science, Swift Programming, ASP.NET with C#

WORK EXPERIENCE

Enterprise Application Engineer, GE Healthcare, India

Apr 2019 – Aug 2021

- Bootstrapped GEHC Payment Engine application and implemented authorization, auth reversal, void, refund with CyberSource payment platform using SAQ A-EP PCI Data Security Standard.
- Developed REST APIs for customer login using OAuth 2.0 and strengthened security of the application by employing token encryption and digital signature.
- Designed a solution for the implementation of ACH payments and set-up of Autopay.
- Created automated deployment script to setup CI/CD pipeline via Jenkins for QA, UAT and production instances.

Software Engineer, GE Healthcare, India

Apr 2017 – Mar 2019

- Scheduled hourly data ingestion using Solr Cloud and developed query microservices for Federated Search Engine.
- Demonstrated its effectiveness with an improved query time by ~90 percent.
- Configured Grafana UI to monitor health of indexing and query microservices.
- Aggregated distributed product information into a single data source by introducing the ability to manage multiple product catalogs by various user groups.
- Participated in technical knowledge sharing sessions and presented Hybris upgradation steps and RxJava concepts to Digital Technology teams comprising of 80+ members.

Software Engineering Specialist, GE Digital, India

Jul 2016 – Mar 2017

- Upgraded SAP Hybris eCommerce platform for the SHS Education application from v5.7 to v6.4.
- Created test scripts using Cucumber for API testing of 10+ RESTful services.
- Improved global search feature to include replaced and compatible products in search results.

Software Engineering Intern, Honeywell Technology Solutions, India

Jan 2016 – Jun 2016

- Built an Augmented Reality application on Android for Aircraft Maintenance Engineers for handheld and wearable devices (Java, FFmpeg, Pocketsphinx, Wikitude AR, Glass SDK, Android NDK, PHP).

RESEARCH EXPERIENCE

Graduate Research Assistant, Data Intensive Distributed Computing Laboratory

Dec 2021 – Present

Advisor: *Dr. Tevfik Kosar*

- Currently working in a team of 10+ research students on [OneDataShare](#), a cloud-hosted data transfer scheduling and optimization service with interoperability between multiple transfer protocols.
- Integrated Hashicorp Vault to securely manage secrets, SSL keys and user credentials in OneDataShare.

PROJECTS

Dynamic Optimization of File Transfer in OneDataShare: Python, Golang, Java, Spring Boot, InfluxDB

- Studied networking conditions of ongoing data transfers and fine-tuned the parameters dynamically using Bayesian optimizer to boost file transfer speed by 10x.

Image Stitching, Computer Vision, and Image Processing: Python, OpenCV, NumPy

- Developed an application in Python to stitch images together to construct a panorama image.

Hybris Launcher: JavaScript, HTML, CSS

- Published a chrome extension on webstore to access SAP Hybris resources from a single dashboard.

AWARDS & INVOLVEMENT

Bravo Award, for the strong commitment and focus shown to enable the launch of VSCAN Air, GE Healthcare, March 2021

Impact Award-Deliver with Focus, for outstanding contribution in the launch of Payment Engine, GE Healthcare, April 2020

Winner, GE Digital Challenge, a business plan competition for all the new hires, GE Digital, August 2016