




AMAN KHALID





SOFTWARE ENGINEER • GRADUATE STUDENT

✉ mailamankhalid@gmail.com ☎ 314-556-9780 📍 Chicago, IL 🔗 [linkedin.com/in/amankhalid-linkedln/](https://www.linkedin.com/in/amankhalid-linkedln/)

EDUCATION

- MASTERS IN COMPUTER SCIENCE, NORTHWESTERN UNIVERSITY
Evanston, Illinois  SEP 2021 - Present
- MASTERS IN COMPUTER SCIENCE, SAINT LOUIS UNIVERSITY
St. Louis, Missouri  AUG 2019 - MAY 2021
- BACHELORS IN COMPUTER SCIENCE & ENGINEERING, AMITY UNIVERSITY
Noida, India  AUG 2013 - MAY 2017

PROFESSIONAL EXPERIENCE

- SLU SCHOOL OF MEDICINE RESEARCH INTERN
📍 St. Louis, MO  MAY 2020 – AUG 2020
- Developed My COVID19 Tracker app using React Native for St. Louis County Department of Public Health.
 - Built the backend of the app with node.js using Hyperledger Fabric's chaincode, and hosted it on AWS.
- SAINT LOUIS UNIVERSITY RESEARCH ASSISTANT
📍 St. Louis, MO  OCT 2019 - MAY 2021
- Implemented real-time resource provisioning for video streaming and segmentation using Kubernetes and Docker.
 - Created a system for analyzing ultrasound images to generate a more comprehensive feed for medical doctors, using handheld transmitter probes, edge offloading, and real-time image analysis using segmentation.
 - Published work in IEEE NFV-SDN 2020 sponsored by Huawei and Intel, on optimizing distributed systems.
- MARSPLAY BACKEND DEVELOPER
📍 New Delhi, India  OCT 2017 - NOV 2018
- Scraped websites with Python to gather inventory details for 8 categories from e-commerce sites for clothing.
 - Developed server-side APIs to facilitate communication between various services of the backend, in node.js.
 - Made microservices for order management, for both influencers and customers.
- MYOLO FULLSTACK DEVELOPER
📍 New Delhi, India  JUL 2016 - SEP 2017
- Worked on the backend to implement interest mapping, location services, and caching, with latency less than 100ms.
 - Simplified the setup & maintenance of staging, development, and production environments hosted on AWS.
 - Coordinated API provisioning with Java Spring and versioning for outsourced client-side app developers(mobile).

PROJECTS

- OPTIMIZED CUCKOO FILTER (ST. LOUIS UNIVERSITY)
OCF is a variant of a cuckoo filter for burst tolerance, low latency, and throughput for membership testing, optimized for distributed data stores operating at high workloads written in Java.
- INFLUENCER HUNTER (MARSPLAY)
It is a tool to find the most prominent profiles under a certain hashtag or location on Instagram and analyze their reach, with web scrapers(python) for data gathering.

Aman Khalid, Flavio Esposito, Alessio Sacco, and Steven C. Smart. "EdgeEcho: An Architecture for Echocardiology at the Edge". In IEEE 17th International Conference on Network and Service Management (CNSM 2021). Izmir, Turkey 25-29 October, 2021; (short paper).

Aman Khalid and F. Esposito, "Optimized Cuckoo Filters for Efficient Distributed SDN and NFV Applications," 2020 IEEE Conference on Network Function Virtualization and Software Defined Networks (NFV-SDN), 2020, pp. 77-83, doi: 10.1109/NFV-SDN50289.2020.9289870.

Aman Khalid (2021). Enabling High-Performance Applications at the Network Edge (Master's thesis, Saint Louis University).