

## Employment

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**Software Engineer, Graduate Services Assistant**      **Cyber-Socio Intelligent Systems Laboratory**      **May 2017 - Present**

- Developed REST API calls in Spring MVC using Hibernate, PostgreSQL, MongoDB and Elastic Search.
- Reduced API latency from 500ms to 30ms by changing authentication mechanism.

**Software Developer**      **ClubInternet**      **May 2016 - Dec 2016**

- Integrated backend google analytics to Django websites to track non-JS(Javascript) traffic, which helped the company raise seed investment.
- Created a non-JS ad platform supported by redis, which became the first and only source of revenue of the company.

## Education

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- **Arizona State University** *MSc Computer Science*      **Jan 2017 - Dec 2018**
  - GPA: 4.00/4.00. Courses: Cloud Computing, Statistical Machine Learning, Software Security.
- **Lahore University of Management Sciences** *BSc Computer Science*      **Aug 2012 - May 2016**
  - Graduate Courses: Topics of Internet Research, Multicore Computing, Topics in Network Security.

## Technical Experience

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- **Statistically Safe - An application that tells users if they're safe in a new neighbourhood**
  - Launched a server on Amazon Web Services to crawl data for the neighbourhood a user is in.
  - Developed an Android app that calculates probability of crime based on historical crime data.
  - Stengthened the prediction model by factoring in the time of day crimes take place.
- **MegaVM - A Memory Enhancing Framework for Datacenters**
  - Enhanced the memory modules of Xen and KVM (Linux Kernel).
  - Prototyped a scheme in which the Hypervisor dynamically shares memory among physical nodes.

## Additional Experience and Awards

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- **SublimeText plugin** A plugin called "InputArgs" that allows the user to send Input Arguments from within Sublime Text, with around 1000 downloads.
- **Hack Arizona 2017 : Sustainability Category Winner** Android App that tracks speed and movement, and detects carbon footprint, incentivizing users to use greener mode of transport.
- **Gold at HackerRank.com Week of Code 21 and 23** Top 250 in both competitions which had over 9000 participants.
- **Teaching Assistant** CS100 (MATLAB), CS200 (C++), Network-Centric Computing (Java)

## Publication

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- **MegaVM - A Memory Enhancing Framework for Datacenters** (March 2016) Rashid Tahir, Gohar Irfan, Bilal Bakht, Hashim Sharif, Fareed Zaffar, Matthew Caesar. *Proceedings of the 13th USENIX Symposium on Networked Systems Design and Implementation (NSDI '16), Santa Clara, CA, USA*

## Languages and Technologies

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- Python, Java, C++.
- Spring MVC, Nginx, Redis, Django, Amazon Web Services, Google App Engine, Microsoft Azure, KVM, Xen Mininet, Pox Controller.