

## Employment

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<b>Software Engineer, Graduate Services Assistant</b>	<b>Cyber-Socio Intelligent Systems Laboratory</b>	<b>May 2017 - Present</b>
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- Redesigned and implemented the Authentication and Login to add expiring API keys.
- Reduced API latency from 500ms to 30ms by changing authentication mechanism.
- Ported API calls from a PostgreSQL database to MongoDB to improve scalability.

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<b>Software Developer</b>	<b>ClubInternet</b>	<b>May 2016 - Dec 2016</b>
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- 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

- **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

- **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.
  - Strengthened 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

- **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

- **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

- Python, Java, C++.
- Spring Boot, Django, KVM, Xen Mininet, Pox Controller.