Musa V. Ahmed
graduate research assistant

Contact
20197 NW 10th ST
Pembroke Pines, FL
33029
USA

(954) 993 0768

mahme012@fiu.edu
GitHub IAmMadSlave
/in/musavahmed

languages
English
Urdu, Hindi & Punjabi

Programming
♥ Python
Java & C/C++

Skills
Object-oriented
Imperative
Testing, Scripting
LaTeX, Linux
Emulation &
Simulation

Education

2014–2015	**Masters** of Computer Science *In Progress* Cumulative GPA: 3.5	Florida International University
2012–2014	**Bachelor** of Computer Science Cumulative GPA: 3.45	Florida International University

Experience

2014–Now — **Florida International University** — Miami, Florida
Graduate Research Assistant
Awarded full graduate assistantship.
Current projects:
- Symbiotic Approach with FluidGPU Model (hybrid emulation and fluid model on GPU)
- Mininet Conflux (realistic background traffic in Mininet using hybrid emulation & simulation approach)
- MyExperiment (full implementation and deployment for GEC 22)
- Thesis in progress.

2014 — **Florida International University** — Miami, Florida
Undergraduate Research Assistant
REU-NSF student during last year of undergraduate career.
Research topics:
- Various link emulators (e.g., Dummynet, tc-netem, etc.)
- Variety of hypervisors & virtualization technologies (e.g., KVM, cgroups, etc.)
- Assisted with PrimoGENI Constellation (large-scale experiments on GENI resources)
- Started MyExperiment project (online repository for network experiments)
- Experimented with Mininet
- Experimented with OpenvSwitch

2013 — **Florida International University** — Miami, Florida
Teaching Assistant
Instructed lab session, held office hours, and proctored exams for Programming I.

Awards

2014	**Outstanding Undergraduate Student**	Florida International University
	Finalist among top students in their final year of a Bachelors degree.	
2014	**Dean's List** Fall 2014	Florida International University
2012	**Dean's List** Fall 2012	Florida International University

Communication Skills

2014	**Oral Presentation**	Florida International University

As part of the course work for CIS4911, I presented my work for senior thesis.

2014	**Oral Presenation**	GEC 21, Indiana University

For GEC 21, I presented my work on the demo floor.

2013	**Poster**	Florida International University

For GEC 21, I created a poster which demonstrates the features of MyExperiment.

2013	**Poster**	Florida International University

As part of the course work for CIS4911, I created a poster which demonstrates my senior thesis.

2013	**Poster**	Florida International University

As part of the course work for CGS3095, I created a poster that shows the rapid advent of unmanned aerial vehicles.

Interests

Professional: Network Emulation & Simulation, Software Testing, and Open Source Software.
Personal: Linux, PC Gaming & Hardware Modification, Track Driving, and Traveling.

Course Work

Computer Science: Object-oriented Programming, Computer Architecture, Data Structures & Algorithms, Database Design & Management, Functional Programming, Imperative Programming, Software Engineering, Operating Systems, Web Development, Compiler Construction, and Software Testing.
Mathematics: Calculus I/II, Statistics & Probabilities, Discrete Math, Linear Algebra, Graph Theory, Numerical Analysis, Propositional Logic, Theory of Computation,.