RABIA SHAHID

George Mason University CERG, ECE Department 4400 University Drive, MS 1G5 VA 22030, USA +703-622-4743 (mobile) E-mail: rshahid@masonlive.gmu.edu

EDUCATION

PHD IN COMPUTER ENGINEERING (2010 – present)

CGPA: 3.89/4.0

PHD program, Electrical and Computer Engineering George Mason University, Fairfax, VA, USA

MS IN COMPUTER ENGINEERING (2008 - 2009)

CGPA: 3.77/4.0

MS program, Electrical and Computer Engineering George Washington University, Washington, DC, USA

MS IN COMPUTER ENGINEERING (2007 - 2008)

CGPA: 3.5/4.0

MS program, Computer Engineering

Centre of Advance Research and Engineering (CASE), Pakistan

BE IN COMPUTER ENGINEERING (2003 – 2007)

CGPA: 3.3/4.0

Bachelors program, Computer Engineering

COMSATS Institute of Information Technology, Pakistan

AWARDS

- Secured Top position in 6th semester with a GPA of 3.92 and 8th semester with a GPA of 4.0 and was awarded scholarship both times.
- Secured 3rd position overall in BCE and was awarded with Bronze Medal.
- Took part in National Testing Service (NTS) scholarship competition and was among 69 selected scholars for the scholarship of MS leading to PHD in Germany. The selection was finalized from almost 10,000 candidates from all over the country.
- Awarded with scholarship for MS leading to PHD in USA. 200 scholarships were awarded in total in all areas of specializations for the Faculty Development Program of University of Engineering and Technology (UET), Peshawar, Pakistan.

RESEARCH INTERESTS

- Cryptographic Hardware and Embedded Systems
- High Performance Parallel Computing
- Reconfigurable Computing
- Microprocessor Development

RESEARCH AND DEVELOPMENT

- Use of embedded resources in implementations of SHA-3 candidates.
- High throughput and logic only implementations of GROESTL hash function.
- Performance evaluation of CUDA, OpenCL, PGI and Matlab Jacket parallel programming languages on FT, MG, EP and and CG kernels of NAP Parallel Benchmarks.
- A Hardware Software Co-Scheduling Methodology for Reconfigurable Computing Systems.
- Hybrid parallel programming with MPI/UPC Interoperability.
- Study of Lanczos Algorithm and Sparse Matrix Multiplication in UPC and MPI.
- CMT/CMP scaling on OPENSPARC T1 Processor.
- Interface development in Picoblaze and Microblaze.
- Guitar effects using TMS320C6713 DSK.

EMPLOYMENT HISTORY:

- Fall 2010 present, **Graduate Research Assistant (GRA)** at ECE, George Mason University.
- Spring 2009 Spring 2010, **Graduate Record Coordinator Assistant** at George Washington University.
- Summer 2008 Fall 2008, **Lecturer** at University of Engineering and Technology (UET), Peshawar, Pakistan
- Fall 2007 Summer 2008, Lecturer at COMSATS Institute of Information Technology, Pakistan.

LANGUAGES

- VHDL/ Verling
- UPC/ MPI
- CUDA/ OpenCL/ PGI/ Matlab Jacket
- Matlab
- C/ Visual C
- SQL
- Picoblaze/ Microblaze/ Assembly programming for Atmel Micro-controllers

REFERENCES

Available on request