

# Nauman Shahid

---

Department of Computer Engineering  
College of Electrical and Mechanical Engineering  
National University of Sciences and Technology  
Islamabad, Pakistan

Phone: +92 314 4086199  
Email: [naumanshahid@msn.com](mailto:naumanshahid@msn.com)  
LinkedIn: <https://pk.linkedin.com/in/snaumanshahid/>  
Website: <https://naumanshahid.github.com/>

Research Interests      Computer Architecture, Reconfigurable Computing, Software Optimization, Software Reliability, Machine Intelligence, High Performance Computing, Networking Paradigms

Education      **Bachelor of Engineering with majors in Computer Engineering**      **September 2010 - June 2014**  
College of Electrical and Mechanical Engineering  
National University of Sciences and Technology, Islamabad, Pakistan  
Final Year Project: An FPGA based approach to Application Aware Routing  
CGPA: 3.68/4.00

**University of Cambridge International Examinations GCE A-Levels**      **June 2010**  
St. Anthony's College, Lawrence Road, Lahore, Pakistan  
Mathematics (A), Physics (A), Chemistry (A\*), Computing (A)

**University of Cambridge International Examinations GCE O-Levels**      **June 2008**  
St. Anthony's College, Lawrence Road, Lahore, Pakistan  
8 O-Levels including Mathematics (A), Physics (A), Chemistry (A), Computer Studies (A)

Professional Experience      **Software Development Engineer**      **November 2015 - Present**  
Mentor Graphics Pakistan Development Pvt. Ltd. (A subsidiary of Mentor Graphics Corporation, Wilsonville, Oregon, USA)

- Responsible for developing and optimizing software for Mentor Graphics proprietary real-time operating system, Nucleus RTOS
- Coding and porting device drivers for WLAN modules in accordance with IEEE 802.11 standards
- Responsible for the maintenance and functional integrity of the security aspects (WPA Supplicant) of the WLAN stack
- Scripting test cases and setting up test environments to monitor and perfect the behaviour of the WLAN stack

**Associate Engineer**      **August 2014 - November 2015**  
u-blox Lahore Pvt. Ltd. (A subsidiary of u-blox AG, Thalwil, Switzerland)

- Part of the handpicked team of three collaborating with the California based counterpart of u-blox to develop a delta encoding and compression solution for Firmware Over-The-Air Update project
- Benchmarked and tweaked several open source delta encoding algorithms to get an insight into the world of binary difference generation
- Solely responsible for the modular, platform independent, and backwards compatible architectural design (and documentation) of the delta file generation solution
- Set up a cross platform build environment for the delta file generation solution
- Authored MISRA C compliant source code for the delta file generation solution
- Past responsibilities included maintenance of 4G LTE/LTE-A Protocol Stack in accordance with the specifications defined by 3GPP
- Scripted test benches for conformance, modular, and regression testing of the communication protocol stack
- Experienced in working with software revision control systems (Perforce), project tracking systems (Jira and Swarm), and continuous integration systems (Jenkins)

### Business Process Automation Intern

July 2014 - August 2014

Telenor Pakistan Pvt. Ltd. (A subsidiary of Telenor Group, Norway)

- Single-handedly responsible for the development and centralization (across Telenor Pakistan intranet) of a sales pipeline web portal
- Created a secure, infallible, and SQL injection-proof user login and permissions approval system using session state functionality of ASP.NET
- Used an amalgamation of C#, HTML, CSS, ASP.NET, and SQL to create a responsive and aesthetically pleasing information retrieval and logging system
- Moulded the system to present different and dedicated views for directors, regional managers, area/assistant managers, regional officers and system administrators
- Shaped the web portal to sport data entry and editing of individual records and batches of records using CSV files
- Added graphical representations and comparisons of predicted, achieved, and targeted sales (monthly, as well as annual)
- Completed the project in five weeks despite the allocated time being eight weeks

### Business Intelligence Intern

June 2013 - August 2013

Techlogix Pakistan Pvt. Ltd.

- Allocated to the team working on a business intelligence reporting project for a financial institution in the Gulf
- Developed reports using SQL queries and RTF templates, and then uploaded them to Oracle Business Intelligence Enterprise Edition server portal
- Monitored and controlled the project's servers and virtual machines (remote and local)
- Responsible for infrastructure software installations, maintenance (Oracle Business Intelligence enterprise manager and administration console), deployment and enhancements
- Performed thorough testing of every release of reports and logged the results on Seapine TestTrack
- Developed Oracle Business Intelligence Enterprise Edition dashboards using HTML and CSS for every release of reports
- Managed the information security part (permissions, users, groups and application roles) of the project
- Set up domain controllers and integrated active directory with Oracle Business Intelligence Enterprise Edition as an alternate authentication provider/identity store over Lightweight Directory Access Protocol
- Sole author of the System Integration Testing guide for the project

### Electrical Engineering Intern

July 2012 - August 2012

Siemens Pakistan Engineering Co. Ltd. (A subsidiary of Siemens AG, Munich, Germany)

- Gained an insight into power, instrument, and distribution transformers along with SF<sub>6</sub> high voltage circuit breakers
- Learned about the energy sector and the challenges faced by it and how Siemens and other energy solution providers the world over are collaborating to tackle those challenges with 'green' solutions
- Learned to interpret electrical substation drawings

### Skills

C, C++, C#, Visual Basic, Python, MATLAB, Verilog, Assembly, SQL, EDA, CAD

### Personal Information

Date of birth: October 21<sup>st</sup>, 1991

Gender: Male

Citizenship: Pakistani