#### **Personal Information**

First name / Surname

**MUHAMMAD UMAIR** 

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### **Work Experience**

Dates

May 2011 to Present

Occupational position held

Open source developer (Language & Tools: C++, Code::Block IDE)

Main activities and responsibilities

- Working on Drizzle White paper for IPv4/IPv6 data type.
- Contributing in fixing bugs in the exiting Drizzle code base.
- Providing support for enabling IPv6 for drizzle on various platforms.

Company Name

Open Source Drizzle.

Dates

May 2011 to August 2011

Occupational position held

Contract Developer at Google Inc. (Language & Tools: C++, Code::Block IDE)

Main activities and responsibilities

Working on Open Source Drizzle project. Drizzle http://drizzle.org/

- Designed & Implemented Native IP Address Data Type for storage of IPv6 & IPv4 Addresses in Drizzle.
- Designed & implemented the algorithms for storing IPv6 & IPv4 address in a custom data type. Implemented INET PTON() and INET NTOP() functions through Object Oriented Model using C++.
- Added INET PTON() & INET NTOP() functions as plug-ins into Drizzle code base.
- Integrated the IP Address Data Type and construction functions into the existing Drizzle code base as a native data type.
- Implemented the test suite system for testing native IP Address Data Type and construction functions.

Company Name

Google

Inc., Mountain View, CA, USA.

Dates

January 2010 to July 2010

Occupational position held

Contract Developer & System Integrator (Java, NetBeans IDE, MySQL)

Main activities and responsibilities

- Designed and Implemented SCADA live dashboard and database which is configured with operational field devices to store the live devices statistics.
- Designed and Implemented Data Reporting System for the SCADA supervisory service on daily bases "Data Quality Reports" from field's source, through the end user.

Company Name

Buraq Integrated Solutions, Australia.

Dates

July 2007 to September 2007

Occupational position held

Apprenticeship Core Network Engineer

Main activities and responsibilities

- Monitor network performance and generate reports using RNO tools.
- Alarm monitoring and handling on Huawei NGN switches.
- Daily Routine hardware checks for NGN switches, Quality of Services (QOS) Testing, Location Area Code (LAC) addition and deletion.
- Site visits for the detection and solution of the on ground switch issues.

Company Name | Mobilink GSM, Orascom Telecom Group.

## **Education Training**

Dates

August 2010 to Present

Title of qualification awarded

Master of Science in Engineering, Majors in Electrical Engineering & Specialization in Wireless Systems.

Name of Institute/University

Royal Institute of Technology (KTH), Stockholm, Sweden.

Dates

September 2005 to August 2009

Title of qualification awarded

Bachelors in Information and Communication System Engineering

Major GPA

3.53/4.0

Name of Institute/University

National University of Sciences and Technology (NUST), H-12 Islamabad Pakistan.

#### **Training**

Dates

July 2008 to August 2008

Tile

Course on "Wireless Channel Modelling and Simulation" has being organized in collaboration with University of Surrey.

#### **Master Semester Projects**

- Sound Radar: Designed and Implemented Android 2.0 Application to measure the distance of the object by using the loudspeaker, microphone, accelerometer and camera of a smart-phone.
- Noise Cancellation: Designed & implemented the algorithms by using different adaptive approaches for the noise cancellation of the real time speech signals.

#### **Research Publication**

Tile

A research paper titled "Automatic Frequency Planning Algorithm for Cellular Networks" has been accepted to international conference "Mobility for Live: Technology, Telecommunication and Problem based Learning" on March 5-7,2012 in Chiang Rai, Thailand.

# **Undergraduate Dissertation**

• Undergrad Dissertation tile "Design and Development of Automatic Frequency Plaining Tool". The project has been completed in collaboration with world leading Warid Telecom (Pvt) Limited, Abu Dhabi and SingTel Alliance. (C++, Matlab)

#### **Professional Certifications**

- GSM Certification ExpertRating Certified Professional.
- Qualified the QUALCOMM CDMA Certification (USA).

#### Honours

- Selected for Google Summer of Code 2011 and awarded \$5000.
- Awarded one-year ACM professional membership by Google Inc.
- Selected undergrad Dissertation for the RECTOR'S GOLD MEDAL.
- Awarded best undergrad Dissertation award at NUST Open House 2009.
- Awarded NUST School of Electrical Engineering and Computer Science OUTSTANDING Badge of Honour and NUST Merit Scholarship.

# Technical Skills and competences

Language: Fluent in English, Swedish.

**Programming:** C/C++, C#, Java, SQL, ASP.NET, HTML, MATLAB.

**Tools:** MS Visual C++ 6, MS Visual Studio.NET, NetBeans IDE, Turbo C, Eclipse, Code::Block IDE, MATLAB, MASM615, Keil µ Vision 2.10, MicroLogix 500,

TEMS, Kepserver OPC Server, Mapinfo, Xilinx ISE 9.2i. **Databases:** MS SQL Server, MySQL, MS-Access.

Operating Systems: Mac, Linux, Windows.

References

Available on request.