

TALHA TARIQ

Personal Info and Contact:

USA: Cell: +1 425 614 9988 (Current)

UK: Cell: +44 782 478 6697

Homepage: talhatariq.wordpress.com

Mail: talha.tariq@gmail.com (preferred)

Address: S-1055 16603 NE 39th Way, Redmond, WA 98052, USA.

Address: RM 6 Chestnuts RHUL, Egham, Surrey TW20 0BQ, UK.

t-talhat@microsoft.com (work)

t.tariq@rhul.ac.uk (edu)

Date of Birth: 25th December, 1983.

Nationality: Pakistani

Marital Status: Single

Education:

- **MS, Information Security** [2007 - 08] **University of London** [Information Security Group at Royal Holloway]
Courses: Network Security, Computer Security, Cryptography, Smart Cards, Trusted Computing, Software Security, Application and Business Security, Security Management.
Thesis currently being researched and developed at Microsoft Research, Redmond USA.
- **BS, Computer Science** [2001 - 05] **National University of Computer & Emerging Sciences** [FAST-NU] Pakistan.
Majors: Software Engineering Minors: Network Security

Work Experience:

Microsoft Research, Redmond USA.

May 2008 - Present: Research Intern (Manycore Incubation in MSR)

- Working on a confidential project.

Sun Microsystems, United Kingdom

December 2007 – May 2008: Technical Consultant (Part time)

- Designed and developed a number of embedded applications on SunSPOTs and SmartCards (JavaCards).
- Worked extensively on the Sun Academic Initiative project to promote open source platforms and software for research in universities.

NCR Corporation, Pakistan [Financial Solutions Division for South Asia, Middle East & Africa]

June 2005 - September 2007: Professional Services Technical Consultant (e-banking).

September 2007 – December 2007: Freelance Contractor (due to Full Time Masters).

- Design, Development and Implementation of monitoring, security, fraud detection & transaction based systems for e-banking, financial, payment and retail industries.
- Working in close liaison with the project manager, team, QA and the clients to ensure quality software deliverables.
- Involved in pre-sale analyses & post-sale implementations for key accounts and projects in more than 5 countries.
- Active participation in design/ product enhancement reviews and process improvement initiatives.

Skill set Summary:

- 3 years of experience in a customer-facing position in enterprise software development & technical consulting role.
- Sound knowledge of Virtualization, Security Services, Cryptography, penetration testing, malware research and reverse engineering, software and security testing, phishing and attack methods.
- Excellent programming and web development skills in major languages, databases and platforms. Very good sense and skill of graphic designing. Sample portfolio can be seen at <http://tt83x.deviantart.com/gallery>
- Domain Knowledge of Telecom & Smart Card Industry (GSM/ UMTS Architecture, SIM lifecycle, JavaCard programming, NFC and RFID Standards and applications)
- Domain knowledge of Banking and Financial Industry (Branch Banking, Consumer products, Operations, Alternate Distribution Channels, Deposits, Settlements), Payments (Cheque clearing and Electronic eXchange), Retail and Airline Industries (Billing, Ticketing, PNR generation, Sabre).

- Good development, integration & implementation knowledge of EMV, CEN-XFS (Extensions for Financial Services), NDC standard for ATMs, ISO-8583 standard for financial transaction middlewares, UPOS standards for Point of Sale machines.

Key Projects:

- **The i-Suite Communication Framework [NCR Global Solutions]** For 2 years I worked as an SDE and then as a Tech Lead for the development of an integrated framework for the NCR Global e-banking Management Solutions. The software is highly focused towards the alternate delivery channels in an e-banking environment. It provides modules for distributed communication, remote system management, fraud detection and dispute resolution, biometric authentication for card-less transactions, electronic journaling, log management and transaction reconciliations between different entities.
Personally did customized development & implementation for more than 7 Financial Institutions in EMEA including: CitiBank PK, Standard Chartered Bank PK, Qatar Islamic Bank, Commercial Bank of Qatar, Cairo International Bank – Egypt, Askari Commercial Bank, Alfalah Bank PK, Bank of Bahrain and Kuwait, Bahrain.
- **Image Cheque Clearing System [NCR Gulf]** Designed and developed an Automated Electronic Cheque Clearing & a secure Transfer Gateway for distributed rule based Inter / Intra Bank Electronic Cheque Envelop Transfers (Consolidation & Distribution) interfacing with the Clearing house. The project was partnered in development with the Central Bank of UAE and I was part of the Cheque Automation Project Team with NCR Dubai.

Research, Freelance and Open Source Projects:

- **RCE.sourceforge.net** - **Remote Command Executor** is a RAT (Remote Administration Tool) in C++ that allows remote process, file & shell command execution with full interactive console on windows systems. (Sole Developer).
- **OCSInventory.sourceforge.net** - **Open Computers & Software Inventory** is a remote patch deployment, software & hardware configuration management & inventory control system. Wrote an independent windows agent for silent patch deployment and command execution on large network systems. (C++, Platform SDK).
- **FILA.sourceforge.net** - **Forensic and Intrusion Log Analyzer** is an analyses tool for Windows & Linux Platforms which focuses on Intrusion and Forensic Activity Trace reporting including Web abuse + SQL Injection, Potential Trojan Activities and Malicious Windows Events from captured data of honeynets. (.NET, libpcap, C++)
- **WiseRecorder.sourceforge.net** - An **IP Call Recorder** with packet sniffer, network visualizer & SIP / RTP analyzer. Scripts for developing a CTI Server on top of asterisks. (Java, MySQL, libpcap).

Technical Skills:

- **Programming:** C++, C#, ASP.NET, Java (embedded). WMI, System & Shell scripting.
- **Windows:** Sound knowledge of Windows (Server) protocols, services, programming, integration & deployment.
- **Virtualization:** Sound knowledge of VMWare, XEN & Virtual Infrastructure on *NIX/ Microsoft platforms.
- **Databases:** SQL Server, MySQL.
- **Security:** Software & Security Testing using Metasploit, Nmap, Nessus, FoundStone, Immunity & Backtrack suite.
- **Reverse Engineering:** Malicious code analysis with IDA Pro, Win /GNU Dbg, iDefence, SysInternals & Bindiff.
- ***NIX:** *nix administration. Intermediate configuration of firewalls, honeynets & Intrusion Detection Systems. Familiar with BSD and other flavors of UNIX.

Professional Trainings:

- Writing to the CEN/XFS API (eXtensions to Financial Services) [NCR University]
- APTRA Advanced NDC Message Protocol (ISO-8583) and APTRA Author. [NCR University]

Selected articles, talks and presentations: [talhatariq.wordpress.com/papers]

- Vulnerability assessment of banking applications in Pakistan. [Project Paper for Network Security Course]
- Runtime Unmanaged Code Analysis for Software and Security Testing [July, 2006]
- Hiding your online presence with the onion routers. [May, 2006]
- Virtualization Detection for malicious code analysis. [Feb, 2006]

- Managed Application Profiling. Optimizing Code for performance. [August, 2006]

Knowledge sessions, presentations and conducted trainings:

- Open Source in the Enterprise – A talk on the Global Software Freedom day at FAST – NU Karachi. [Sep, 07]
- The Windows Core Management Interfaces – Windows Management & Instrumentation at NCR [Oct, 06]
- Development Best Practices - Cross Site Scripting - Problems and Remedies at NCR [Jun, 06]
- Advance Network Troubleshooting and Monitoring through Ethereal / Microsoft Network Monitor. [Dec, 05]
- Using Virtualization to Streamline Development & Testing at NCR. [Nov, 05].

Activities:

- Member of the Student Staff Committee for the Information Security Group at RHUL representing 150 students.
- Student Member of University of London IEEE and LUG (Linux Users Group).
- Deploying, monitoring & analyzing a High Interaction Virtual HoneyNet at RHUL with Abatis (www.abatis-hdf.com)
- Maintained an R&D lab at NCR, Deployed a Network Simulator (ns-2), NAGIOS, Honeynet (ROO) & a VM library.
- Active member of DYK (Do You Know) Share your knowledge sessions organizer within NCR.
- Maintains a personal blog, code, article, tool and script archive at [talhatariq.wordpress.com]
- **A hobbyist graphic designer and photographer: complete portfolio at: [tt83x.deviantart.com]**

Achievements:

- Won the Webwave Website Competition & 3rd prize at the Maya Student competition representing FAST-NU.
- Design Incharge for ONLINE, the Annual Student University Magazine at FAST NU. Led a Team of over 15 people for the design and production of the magazine.