Vaibhav Bajpai

CONTACT
INFORMATION

Computer Networks and Distributed Systems
School of Engineering & Sciences
Jacobs University Bremen, Germany

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EDUCATION

Jacobs University Bremen, Germany   **Sep 2012—Present**
Doctor of Philosophy, Computer Science

— *Dissertation title: Understanding the Impact of Network Infrastructure
  Changes using Large-Scale Measurement Platforms*
— *Dissertation work under the guidance of Prof. Dr. Jürgen Schönwälder*

Jacobs University Bremen, Germany   **Sep 2010—Aug 2012**
Master of Science, Computer Science

— *Masters Thesis: A complete system integration of the network flow
  query language, under the guidance of Prof. Dr. Jürgen Schönwälder*
— *Graduated with a 1.0 grade on the masters thesis, 1.64 overall GPA*
— *Merit-based tuition scholarship and stipend for the entire duration*

Uttar Pradesh Technical University, India   **Aug 2005—Jun 2009**
Bachelor of Technology, Computer Science and Engineering

— *Bachelors Project: Dexter, A social experience on top of google search
  results, under the guidance of Prof. Sanjeev Pippal*
— *Graduated as the top student of the class (80.84%)*
— *Merit position 9th amongst all freshmen encompassing 600 affiliated colleges*

Kendriya Vidyalaya Aliganj, India   **Mar 2003—Mar 2005**
Central Board of Secondary Education

— *Graduated as the top student of the class (3rd in city) in XII (93.4%)*
— *Merit certificate for 100% marks in Computer Science in XII*
— *Graduated as the top student of the class in X (86.0%)*
— *Merit certificate for 100% marks in Science in X (felicitated by the State Govt)*
— *All-India merit position 35th in Junior Mathematics Olympiad, 2002.*

PROFESSIONAL
EXPERIENCE

Jacobs University Bremen, Germany   **Dec 2012—Present**
Research Associate

— *Leone FP7 EU Project: From Global Measurements to Local Management*

Jacobs University Bremen, Germany   **Feb 2011—Aug 2012**
Student & Teaching Assistant

— *Implementation of the Network Flow Query Language (NFQL)*
— *Software Engineering Lab, Spring 2012*
— *Networks and Protocols & Algorithms and Data Structures, Fall 2011*
— *Machine Vision Project, Spring 2011*

Infosys Technologies Ltd, Bangalore, India   **Jul 2009—Jun 2010**
Systems Engineer

— *Certified, Infosys Mainframe Foundation Developer, PR — 101*
— *Felicitated as the top entry-level candidate after industrial training (GPA 5/5)*

OPEN SOURCE   Author
               — NFQL, *An efficient C implementation of a stream-based flow query language*

               Contributor
               — ncclient, *A Python library for NETCONF clients.*
               — libnetconf, *A NETCONF library in C intended for building NETCONF clients and servers.*
               — mtr, *A network diagnostic tool.*
               — petascope, *A reference implmenetation of the OGC WCS standard suite.*

INVITED TALKS Evaluating the Effectiveness of Happy Eyeballs, *RIPE 66 Meeting*, Dublin, May 2013.

               Happy Eyeballs, *2nd Leone Plenary, a Collaborative Research Project within the 7th Framework Programme of the European Commission*, Rome, February 2013.

SEMINARS   Global Measurement Framework (13472), *A 3-day invitation-only Dagstuhl seminar on Initiating a Coherent Global Measurement Framework for the Internet*, LZI Schloss Dagstuhl, Wadern, November 2013.

TUTORIALS   Large-Scale Measurement Platforms, *7th International Conference on Autonomous Infrastructure, Management and Security (AIMS)*, Barcelona, June 2013.

ACTIVITIES   Course Lectures
               — Semaphore Patterns & Memory Management, *Operating Systems, February, 2013*
               — NFQL & ncclient, *Advanced Networking, October, 2012*

               Reviewer
               — International Conference on Autonomous Infrastructure, Management and Security (AIMS), 2013
               — IFIP/IEEE Interational Symposium on Integrated Network Management (IM), 2013

               Project Supervision
               — IPFIX support for NFQL, *Masters Project*
               — A Front-End Parser Implementation for NFQL, *Bachelors Thesis*
               — NETCONF over TLS implementation, *Bachelors Project*

               Memberships
               — IEEE Student Membership
               — IEEE Communications Society Membership
               — Internet Society Membership

PUBLICATIONS   Vaibhav Bajpai, Jürgen Schönwälder: Understanding the Impact of Network Infrastructure Changes using Large-Scale Measurement Platforms, *7th International Conference on Autonomous Infrastructure, Management and Security (AIMS)*, Barcelona, June 2013.

               Vaibhav Bajpai, Johannes Schauer, Jürgen Schönwälder: NFQL: A Tool for Querying Network Flow Records, *13th IEEE International Symposium on Integrated Network Management (IM)*, Ghent, May 2013.

               Vaibhav Bajpai, Vitali Bashko, Catalin David, Siarhei Kuryla, Vladislav Perelman, Johannes Schauer, Nikolay Melnikov, Anuj Sehgal, Jürgen Schönwälder: Design and Prototype Implementation of the WattsApp Telemetry Platform, *IEEE International Conference on Internet of Things (iThings)*, Besançon, November 2012.

               Vaibhav Bajpai and Vladislav Perelman: A Cross-Platform Open Source 3D Object Reconstruction System using a Laser Line Projector, *3rd IEEE Germany Student Conference (GSC)*, Passau, November 2012.

               Vaibhav Bajpai, Nikolay Melnikov, Anuj Sehgal, Jürgen Schönwälder: Flow-based Identification of Failures Caused by IPv6 Transition Mechanisms, *6th Conference on Autonomous Infrastructure, Management and Security (AIMS)* Luxembourg, June 2012.