

Shayan Shahand

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Education

Nanyang Technological University (NTU), Singapore Aug 2006 - Jul 2009
School of Computer Engineering (SCE), Division of Computer Science
Master of Engineering by research in Computer Engineering
Concentrations on Grid Computing and Distributed Systems
GPA: 4.33/5.00

Shahid Beheshti University[§] (SBU), Tehran, Iran Sep 2002 - Jul 2006
School of Electrical and Computer Engineering (ECE)
Bachelor of Engineering in Computer Engineering
Major in Software Engineering
GPA: 16.00/20.00

High School and Pre-University, Esfahan, Iran Sep 1998 - Aug 2002
Emam Mohammad Bagher high school and pre-university
Diploma in Mathematics and Physics
Pre-university GPA: 19.29/20.00
High school GPA: 19.69/20.00

Research Activities

A Dynamic Web Service Scheduling and Deployment Framework for Grid Workflow Jan 2007 - Jul 2009
Under supervision of Prof. Stephen J. Turner in Parallel and Distributed Computing Center (PDCC), SCE, NTU
As the Master of Engineering research project.
I proposed, designed and developed a dynamic Web service scheduling and deployment framework that supports the workflow management of dynamic services on Grid resources. Dynamic Web service deployment on the Grid enables the system to distribute workflow tasks on the Grid computing resources evenly and allows jobs to be executed on the same site as where the input data is located. Therefore, the proposed system increases resource utilization and availability, prevents bottlenecks, decreases data-intensive workflow execution time and is more reliable, flexible and fault-tolerant.

Network Measurements in P2P File Sharing Systems: Algorithms, Tools and Techniques Jan 2006 - Jul 2006
Under supervision of Dr. Maghsoud Abbaspour in Network Lab, ECE, SBU
As the Final Year Project to fulfill Bachelor's degree requirements.
I surveyed several P2P systems and protocols like DHT, Kademia, CAN, Chord, BitTorrent and etc with concentration on the utilized algorithms and approaches for efficient data lookup, robust network structures and efficient and fair data distribution. I also studied tools and techniques in measuring P2P networks and distributed systems.

[§] former National University of Iran

Research Interests

- **Distributed Systems**
- **Parallel & Distributed Computing:** Grid computing, Cloud computing, Cluster computing
- **Modeling & Simulation:** Agent-based simulation, Complex system simulation
- **Misc:** Computational science, Data mining, Ubiquitous computing, Pervasive computing, Service Oriented Architectures, Web services, Workflow

Professional Experience

Full-time:

- **Project Officer**, NTU, Singapore Feb 2009 - Aug 2009
*Worked in a team on an A*STAR-funded project entitled as "An Integrated and Adaptive Simulation-Based Decision-Support Framework for High Tech Manufacturing and Service Networks". During which, I worked on a discrete event simulation model of a semiconductor wafer fabrication site using the Applied AutoSched AP.*
- **Network Engineer**, JahanOnline ISP, Esfahan, Iran Jul 2005 - Sep 2005
As the internship (Industrial Attachment) program

Part-time:

- **Technical Lead**, The Digital Movement (TDM), Singapore Jan 2008 - Current
TDM is a young, not-for-profit, organization striving to build and connect thought leaders in the digital space. TDM members hope to achieve their goal by sharing and spreading the passion for technology and innovation, and also by building platforms to facilitate the exchange of ideas. TDM managed to hold several successful conferences in SEA about Web2.0, mobile space, entrepreneurship and etc. Web site: <http://www.tdm.sg>
- **Co-Founder & CTO**, Lilihood Pte. Ltd., Singapore Jan 2008 - Jul 2008
The company achieved to receive 50K S\$ as the seed funding grant and released three Web2.0 products: <http://www.lilihood.com>, <http://www.picartia.com> and <http://www.flishr.com>
- **Teacher Assistant**, NTU, Singapore Jan 2008 - Apr 2008
*AY07-08, SemII
Course: Object-Oriented Programming (in Java) and Data Structures Lab*
- **Teacher Assistant**, NTU, Singapore Sep 2007 - Dec 2007
*AY07-08, SemI
Course: Object-Oriented Programming (in Java) and Data Structures Lab*
- **Tutor**, Catholic High School, Singapore Aug 2007 - Sep 2007
Coaching the school's algorithm team for the 23rd Singapore National Software Competition (NSC). The team achieved "2nd Runner-Up" position.
- **Technical Manager**, Newsletter of 18th Tehran Intl. Book fair. Tehran, Iran May 2005 - May 2005
- **Technical & Executive Manager**, Newsletter of 1st Iranian Festival of Books for Children & Young Adults Kerman, Iran Mar 2005 - Mar 2005
- **Technical Manager**, Newsletter of 17th Tehran Intl. Book fair. Tehran, Iran May 2004 - May 2004

Publications & Presentations

Academic Publications:

- **Shayan Shahand**, “*A Dynamic Web Service Scheduling and Deployment Framework for Grid Workflow*”, Master of Engineering Thesis under supervision of Prof. Stephen John Turner, Division of Computer Science, School of Computer Engineering, Nanyang Technological University, Singapore, July 2009.
- Maryam Khademi, Wentong Cai, Stephen J. Turner, **Shayan Shahand**, “*Distributed Execution of Workflow by Using Parallel Partitioning*”, the 2009 IEEE International Symposium on Parallel and Distributed Processing with Applications (ISPA09), August 2009.
- **Shayan Shahand**, “*A Dynamic Web Service Scheduling and Deployment Framework for Grid Workflow*”, Master of Engineering First Year Report under supervision of Prof. Stephen John Turner, Division of Computer Science, School of Computer Engineering, Nanyang Technological University, Singapore, September 2007.
- **Shayan Shahand**, “*Network Measurements in P2P File Sharing Systems: Algorithms, Tools and Techniques*”, Bachelor of Engineering Final Year Report under supervision of Dr. Maghsoud Abbaspour, School of Electrical and Computer Engineering, Shahid Beheshti University, Tehran, Iran, July 2006.

Presentations:

- **Shayan Shahand**, “*Modeling stock order flow and learning market making from data*”, Presented in Research week at the University of Esfahan, Esfahan, Iran, November 2005.

Newspapers and Magazines[†]:

- “*Sending a fax from the PC*”, Hamshahri Javan weekly magazine, January 8th 2005.
- “*The fiery fox of the Internet; introduction to Mozilla Firefox*”, Hamshahri Javan weekly magazine, January 1st 2005.
- “*Ways to enter the Cyberspace*”, Shargh Newspaper, September 26th 2004.
- “*Presenting 3D scenes; the story of microprocessors - 3rd part*”, Shargh Newspaper, September 7th 2004.
- “*Intel’s front-line; the story of microprocessors - 2nd part*”, Shargh Newspaper, September 5th 2004.
- “*The story of microprocessors - 1st part*”, Shargh Newspaper, August 29th 2004.
- “*Quantum computers; the new generation of supercomputers*”, Shargh Newspaper, August 24th 2004.
- “*The reliable operating system; a glance to Linux capabilities*”, Shargh Newspaper, July 31st 2004.

Academic Honors

A*STAR International Graduate Scholarship (IGS)

Aug 2006

Full research scholarship from Agency for Science, Technology and Research (A*STAR) for two years

Ranked 1179 among 500,000+ competitors in Iran’s National University Entrance Contest
Aug 2002

[†] in Persian (Farsi), sole author

Computer Skills **Languages:** Java, C/C++, Python, C#, XML, HTML, PHP, MySQL, Bash, L^AT_EX
Toolkits: Globus Toolkit 4, MPICH
OS: Linux, Unix, Windows

Languages **English:** Internet Based TOEFL (ibT) — Score 102 Oct 2008
Persian (Farsi): Native

Certificates PADI Rescue Diver May 2009
PADI Advanced Open Water Diver Jun 2008
PADI Basic Open Water Diver Sep 2007

Memberships IEEE Graduate Student Member # 80632844 Jan 2007 - Current

Miscellaneous **GRE:** Quantitative: 780 — Verbal: 330 Nov 2008
Sports: Swimming, Diving, Squash, Basketball, Bouldering
Music instrument: Chromatic Harmonica

References **Prof. Stephen J. Turner**
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Sweden
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