

# Huy Nguyen

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| CONTACT INFORMATION     | Wireless Research System Group<br>Department of Computer Science<br>University of Houston<br>Houston, Texas 77204   | office : +1 713-440-0054<br>mobile : +1 281-673-5351<br>hanguyen5@uh.edu<br><a href="http://www2.cs.uh.edu/~nahuy/">http://www2.cs.uh.edu/~nahuy/</a> |
| RESEARCH INTERESTS      | <b>Inference on complex networks:</b> information diffusion on social network, wireless sensor network monitoring, anomaly and intrusion detection.<br><br><b>Theory:</b> graph theory, approximation and optimization algorithm, machine learning.   |   |
| EDUCATION               | <b>University of Houston</b> , Houston, Texas<br><i>Doctor of Philosophy (Ph.D.) in Computer Science</i> <ul style="list-style-type: none"><li>• Current GPA: 3.83/4.00</li><li>• Expected graduation: Spring 2013</li><li>• Thesis: “<i>Inference on Complex Networks: Methodologies and Applications</i>”</li></ul> <b>Chonnam National University</b> , Gwangju, South Korea<br><i>Master of Engineering (M.E.) in Computer Science</i> <ul style="list-style-type: none"><li>• Accumulated GPA: 4.44/4.50</li><li>• Academic rank: 2<sup>nd</sup>/50</li><li>• Thesis: “<i>BASMIN: A Way to Maximize Network User Happiness</i>”</li></ul> <b>University of Science</b> , VNUHCM, Ho Chi Minh City, Vietnam<br><i>Bachelor of Science (B.S.) in Computer Science</i> <ul style="list-style-type: none"><li>• Accumulated GPA: 8.37/10.0</li><li>• Academic rank: 6<sup>th</sup>/450</li><li>• Thesis: “<i>VnElearning: An Integrated Open Source Elearning System</i>”</li></ul>  | <b>Aug. 2009 – present</b><br><br><b>Mar. 2007 – Mar. 2009</b><br><br><b>Sep. 2002 – Sep. 2006</b>  |
| PROFESSIONAL EXPERIENCE | <b>Idera</b> , Houston, Texas <ul style="list-style-type: none"><li>• <b>Summer Research Intern</b> at SQL Team, working on SQL diagnostic manager, a performance monitoring and diagnostics solution for SQL Servers.</li><li>• Built a DB harness tool, which accelerates the development process and helps QAs in testing the releasing product.</li><li>• Built Rally Apps, which improves team collaboration and facilitates project management.</li><li>• Technologies: C#, Javascript, MS SQL Server.</li></ul> <b>University of Houston</b> , Houston, Texas <ul style="list-style-type: none"><li>• <b>Research Assistant</b> at Wireless Research System Group</li><li>• Research topics: wireless sensor network monitoring, topology inference, cognitive radio network, spectrum sensing, information diffusion on social networks.</li><li>• Accomplishments: 5 top-tier conference publications, 4 top-tier journal publications, WiSeR best student award, TPEG, NSMAA scholarships.</li></ul> <b>Chonnam National University</b> , Gwangju, South Korea <ul style="list-style-type: none"><li>• <b>Research Assistant</b> at Advanced Network Lab.</li><li>• Research topics: network anomaly and intrusion detection, network quality assurance.</li><li>• Accomplishments: 6 IEEE conference publications, 1 journal publication, IITA, Global and BK21 scholarships.</li></ul> <b>ELCA Information Technology</b> , Ho Chi Minh City, Vietnam <ul style="list-style-type: none"><li>• <b>Software Engineer</b> on SecuTix 360° project, an integrated ticketing solution, developed for professionals working in the live entertainment, events and leisure industries.</li><li>• Built front-end modules and wrote unit tests for SecuTix web UI.</li><li>• Rebuilt the connector interface between the web UI and other system components, significantly increase the interaction speed between the components.</li><li>• Technologies: Java, PHP, Oracle Server.</li></ul> | <b>May 2012 – Aug. 2012</b><br><br><b>Aug. 2009 – present</b><br><br><b>Mar. 2007 – Feb. 2009</b><br><br><b>Sep. 2006 – Feb. 2007</b>                 |
| TECHNICAL SKILLS        | <b>Programming Languages:</b> <ul style="list-style-type: none"><li>• Proficient: C/C++, C#, Java, PHP, Matlab</li><li>• Experienced: ASP, JSP, HTML, XML, Javascript, SQL, Python, Pascal, Fortran</li></ul> <b>Database Systems:</b> <ul style="list-style-type: none"><li>• Microsoft SQL Server, MySQL, Postgre SQL, Oracle, SQLite</li></ul>   |   |

## Miscellaneous Technologies:

- Windows Azure Platform, SQL Azure, Microsoft Hawaii Services (Cloud Computing)
- Silverlight XAML (Windows Mobile Programming)
- SVN/CVS (Source Control)
- Agile Software Development

## SELECTED PUBLICATIONS

- Huy Nguyen, G. Scalosub, and R. Zheng “On Quality of Monitoring for Multi-channel Wireless Infrastructure Networks”, *IEEE Transactions on Mobile Computing (TMC)*, accepted for publication. (**Impact factor = 2.283**)
- Huy Nguyen, G. Zheng, Z. Han, and R. Zheng “Binary Inference for Primary User Separation in Cognitive Radio Networks”, In *IEEE Transactions on Wireless Communications (TWC)*, accepted for publication. (**Impact factor = 2.586**)
- Y. Huang, M. Esmalifalak, Huy Nguyen, R. Zheng, Z. Han, H. Li, and L. Song “Bad Data Injection in Smart Grid: Attack and Defense Mechanisms”, In *IEEE Communications Magazine (ComMag)*, Vol 51, Issue 1, January 2013. (**Impact factor = 3.785**)
- Huy Nguyen, and R. Zheng, “Influence Spread in Large-Scale Social Networks – A Belief Propagation Approach”, In *Proc. of the 23rd European Conf. on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML-PKDD)*, September 24-28, Bristol, UK, 2012. (**Acceptance rate = 23%**)
- Huy Nguyen, and R. Zheng, “Binary Independent Component Analysis with OR Mixtures”, In *IEEE Transactions on Signal Processing (TSP)*, Vol 59, Issue 7, July 2011. (**Impact factor = 2.651**)
- Huy Nguyen, N. Nguyen, Z. Han and R. Zheng, “Binary Blind Identification of Wireless Transmission Technologies for Wide-band Spectrum Monitoring”, In *Proc. of the 54th IEEE Global Communication Conf. (GLOBECOM)*, December 5-9, Houston, Texas, USA, 2011. (**Acceptance rate = 36.7%**)
- A. Chhetri, Huy Nguyen, G. Scalosub, and R. Zheng, “On Quality of Monitoring for Multi-channel Wireless Infrastructure Networks”, In *Proc. of the 11th ACM Int. Symp. on Mobile Ad Hoc Networking and Computing (MOBIHOC)*, September 20-24, Chicago, Illinois, USA, 2010. (**Acceptance rate = 17.7%**)

## SELECTED AWARDS

**WiSeR Best Student of the Year, 2010, 2011**

**Chonnam National University Global Scholarship, 2009**

- Top 3% students of the Chonnam National University

**Institute of Information Technology Assessment (IITA) Scholarship, 2007, 2008**

- Awarded by the Korean Government to only 50 foreign students per year in South Korea

**The University of Natural Sciences’ Roll of Honor, 2006**

- Top 5 students of the University of Sciences

**TMA Scholarship, 2006**

- Best student of the year (ranked 1<sup>st</sup>/450) from the Dept. of C.S., University of Sciences

## MISCELLANEOUS

External reviewer for IEEE INFOCOM, GLOBECOM, WASA, ICNP, ICDCS

IEEE student member

Active member on ProjectEuler.net (level 5 member, +125 problems solved)

## REFERENCES

**Rong Zheng (advisor)**

Associate Professor

Department of Computing and Software

McMaster University

Email: rzheng@mcmaster.ca

**Zhu Han**

Associate Professor

Department of Electrical and Computer Engineering

University of Houston

Email: zhan2@uh.edu