

# Quang M. Nguyen

Phone: +1 (412) 482-0545

Email: [quang@cs.pitt.edu](mailto:quang@cs.pitt.edu)

Homepage: <http://www.cs.pitt.edu/~quang>

University of Pittsburgh  
Computer Science Department  
210 S. Bouquet St., Office 5406  
Pittsburgh, PA 15213

## OBJECTIVE

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Seeking a research/development internship related to machine learning or data mining

## EDUCATION

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**PhD Candidate**, Computer Science, University of Pittsburgh, Pittsburgh, USA

Expected graduation: Fall 2013

Advisor: Milos Hauskrecht, PhD

**BS/MS** (5-year program), Computer Science, Lomonosov Moscow State University, Moscow, Russia

June 2006

Advisor: Igor Mashechkin, PhD

## RESEARCH INTERESTS

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### Machine learning and data mining

- Learning from multiple annotators
- Learning from auxiliary information

### Decision support in biomedical informatics

- Application of machine learning and data mining techniques for disease diagnosis
- Visualization of medical data to support decision making in medicine

## RESEARCH PROJECTS

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These projects are sponsored by National Institute of Health (NIH)

### Learning from multiple annotators

- Developed methods to learn a consensus model from multiple annotators by modeling differences in knowledge, reliability and bias

### Learning from auxiliary information

- Developed a framework to learn better classification models with smaller sample complexity by incorporating auxiliary probabilistic information

### Outlier detection in large clinical databases

- Designed and developed a web-based system to visualize medical data and support disease diagnosis. The system has been used by physicians from University of Pittsburgh Medical Center.

## PUBLICATIONS

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**Q. Nguyen**, H. Valizadegan, and M. Hauskrecht. *Learning from multiple experts*. Twenty-sixth AAAI Conference on Artificial Intelligence (AAAI'12), Toronto, Canada. *Submitted, under review*

**Q. Nguyen**, H. Valizadegan, and M. Hauskrecht. *Learning classification with auxiliary probabilistic information*. IEEE International Conference on Data Mining (ICDM'11), Vancouver, Canada, December 2011 (regular paper, acceptance rate:  $101/822 = 12\%$ )

**Q. Nguyen**, H. Valizadegan, and M. Hauskrecht. *Sample-efficient learning with auxiliary class-label information*. Annual American Medical Informatics Association Symposium (AMIA'11), October 2011

**Q. Nguyen**, I. Mashechkin. *Design and implementation of log consolidation system*. BS/MS thesis, Department of Computational Mathematics and Cybernetics, Lomonosov Moscow State University, June 2006

## **WORK EXPERIENCE**

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**Graduate Student Researcher:** CS Department, University of Pittsburgh, 01/2010 - present

- Developed machine learning and data mining techniques for application in biomedical informatics
- Developed a system to visualize medical data and support disease diagnosis

**Teaching Assistant:** CS Department, University of Pittsburgh, 09/2007-12/2009

Led recitations, graded projects, tests and home-works for the following courses:

- Introduction to Programming (Fall 2009)
- Intermediate Programming Using Java (Summer 2008, Spring 2009)
- Data Structures (Spring 2008, Summer 2009)
- Structure of Programming Languages (Fall 2007)
- Introduction to Compiler Design (Fall 2008)
- Software Engineering (Fall 2008)
- Introduction to Simulation (Fall 2007)
- Introduction to Operating Systems (Summer 2008)

## **AWARDS**

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Graduate research assistantship, University of Pittsburgh, CS Department, 01/2010 – present

Travel award, ICDM conference, 12/2011

Travel award, University of Pittsburgh, CS Department, 10/2011

Graduate teaching assistantship, University of Pittsburgh, CS Department, 09/2007 – 12/2009

## **TECHNICAL EXPERTISE**

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Numerical computing tools: Matlab

Programming languages: Java, JavaFX , C, C++, Python, Lisp

Web and scripting languages: HTML, XML, SQL

Programming tools: NetBeans, Eclipse

Operating systems: Windows, UNIX

Databases: MySql

## **LANGUAGE SKILLS**

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Vietnamese (native), English (fluent), Russian (fluent)