

Xuan GUO

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(585) 201-2213

EDUCATION

Ph.D in Computing and Information Sciences, Rochester Institute of Technology

- Advisor: Anne R. Haake, Ph.D *Expected: May 2017*
- GPA: 3.64
- Relevant course work: Human Computer Interaction, Computer Vision, Artificial Intelligence, Statistical Machine Learning, Human Visual System, Image Understanding, Natural Language Processing, Optimization

B.Eng in Software Engineering, Nankai University

2007–2011

- GPA: 3.7
- Relevant course work: Information Retrieval, Data Structure and Algorithms Design, Software Testing, Software Architecture, Database Management, Advanced Mathematics, Linear Algebra

RESEARCH
EXPERIENCE

Graduate Research Assistant

(1) Interactive Machine Learning 2015–present

- Developed a user-in-the-loop paradigm for human-machine collaborations
- **Guo X.**, Yu Q., Li R., Alm C. O., Calvelli C., Shi P., & Haake A. R. (2016, April). An expert-in-the-loop paradigm for learning medical image grouping. In *The 20th Pacific Asia Conference on Knowledge Discovery and Data Mining*, (pp. 477-488). Springer International Publishing.

(2) Algorithmic Data Fusion 2014–2015

- Learned a unified representation from multimodal data via a sparse coding-based algorithm
- **Guo X.**, Yu Q., Li R., Alm C. O., & Haake A. R. (2014, November). Fusing multimodal human expert data to uncover hidden semantics. In *Proceedings of the 7th Workshop on Eye Gaze in Intelligent Human Machine Interaction: Eye-Gaze & Multimodality*, (pp. 21–26). ACM.

(3) Multimodal Retrieval System 2013–2014

- Coded using JavaCV for online image feature extraction & matching; Developed an gaze-interactive retrieval system using eye tracking APIs; Coded in Python and Perl with UMLS for concept extraction from text input
- **Guo X.**, Li R., Alm C. O., Yu Q., Pelz J. B., Shi P., & Haake A. R. (2014, March). Infusing perceptual expertise and domain knowledge into a human-centered image retrieval system: a prototype application. In *Proceedings of the Symposium on Eye Tracking Research and Applications*, (pp. 275–278). ACM.
- **Guo, X.** (2015, March). Multimodal Interactive Machine Learning for User Understanding. In *Proceedings of the 20th International Conference on Intelligent User Interfaces Companion*, (pp. 129-132). ACM.

(4) Speech Data Mining 2013

- Explored semantic relatedness & lexical consensus by programming with UMLS ontology
- **Guo X.**, Yu Q., Alm C. O., Calvelli C., Pelz J. B., Shi P., & Haake A. R. (2014). From spoken narratives to domain knowledge: mining linguistic data for medical image understanding. *Artificial Intelligence in Medicine*. 62(2), 79–90.

TECHNICAL
SKILLS

Languages: Java, Python, Perl, XML, C++, SQL, Matlab, L^AT_EX

APIs, Framework and Software: Scipy, Numpy, OpenCV, Spark, EMR tools

Operating Systems: Ubuntu, Red hat, Mac, Windows, Cloud Computing

PROFESSIONAL EXPERIENCE	SDE Intern at Amazon.com, Inc.	Summers 2015 & 2016
	Data Analyst Volunteer at Lollypop Farm	2015
	IEEE & ACM Member	2014–present
	Reviewer	Aug.–Sept. 2014, Nov. 2015
	– Journal of Artificial Intelligence in Medicine Editor: Klaus-Peter Adlassnig, Ph.D	
	– Gaze-In Workshop @ 16th ACM ICMI Organizer: Hung-Hsuan Huang, Ph.D	
	– 2016 Symposium on Eye Tracking Research & Applications Paper Chair: Roman Bednarik, Ph.D	
	– Journal of Health & Medical Informatics Editorial Board: David Randall, Ph.D	
	Guest Presenter	July 2013
	– Knowledge Representation: From Data to Knowledge, Educational Workshop at Rochester Institute of Technology – Instructors: Cecilia Ovesdotter Alm, Ph.D and Anne R. Haake, Ph.D	
Developer	Aug.–Sept. 2014, 2009–2011	
– Implementation of research group website – Developing 3D Game for Psychological Study of Fire Escape from Indoor Virtuality National Undergraduate Project Award, China		
Coordinator & Investigator	Sept. 2014–May 2016	
– Hosting on-campus EEG devices demonstrations – Psychtoolbox custom scripting for online EEG data collection – Co-collecting eye tracking and EEG data from Stroop test		
TEACHING EXPERIENCE	Guest Lecturer and Laboratory Instructor	2013
	– Usability Testing (4004–749, RIT) – Instructor: Anne R. Haake, Ph.D	
	Guest Lecturer	2013
	– Introduction to Natural Language Processing (ENGL–781/481, RIT) – Instructors: Cecilia Ovesdotter Alm, Ph.D	
Teaching Assistant	2008–2009	
– Introduction to Java; Project management – Instructor: Eliza D. Karuthudaiyan, Ph.D		
REFERENCES	Anne R. Haake (arhics@rit.edu) Dean of Computing and Information Sciences, Rochester Institute of Technology	
	Qi Yu (qyuvks@rit.edu) Associate Professor of Computing and Information Sciences, RIT	
	Cecilia Ovesdotter Alm (coagla@rit.edu) Assistant Professor at RIT and Extended Faculty of PhD Program in Computing and Information Sciences	
	Rui Li (rxl5604@rit.edu) Visiting Professor of Computing and Information Sciences, RIT	
	Pengcheng Shi (spcast@rit.edu) PhD Program Director and Professor of Computing and Information Sciences, RIT	