

Truong-Huy Dinh Nguyen

Curriculum Vitae

Journalism Building 238
Department of Computer Science
Texas A&M University-Commerce
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EDUCATION

Ph.D. School of Computing, National University of Singapore, Singapore, 2013
B.Comp., School of Computing, National University of Singapore, Singapore, 2006

PROFESSIONAL EXPERIENCE

2015-present Assistant Professor, Department of Computer Science and Information Systems,
Texas A&M University-Commerce, Commerce, TX
2013-2015 Postdoctoral Research Associate, College of Arts, Media and Design,
Northeastern University, Boston, MA
2013 Research Engineer, Living Analytics Research Center, Singapore

PUBLICATIONS

Patents

2015 Seif El-Nasr, M., Canossa, A., and Nguyen, T.-H. D. Exploratory Visual Analytics System. *US Provisional Patent Application No. 62/180,883*, Unpublished (filing date Jun. 17, 2015)

Book Chapters

Submitted Carstensdottir, E., Nguyen, T.-H. D., and Seif El-Nasr, M. Believable Personality Model: Non-verbal Behavior for Warmth and Competence. In *Integrating Cognitive Architectures into Virtual Character Design*, IGI Global, Hershey, Pennsylvania.
2015 Nguyen, T.-H. D., Chen, Z., and Seif El-Nasr, M. Analytics-based AI Techniques for Better Gaming Experience. In *Game AI Pro 2*, CRC Press, Boca Raton, Florida.

Peer Reviewed Conference Papers

- In revision Nguyen, T.-H. D., Seif El-Nasr, M., and Canossa, A. Exploratory Visual Analytics for Multimodal Data Analysis. In *The IEEE Conference on Visual Analytics Science and Technology (IEEE VAST 2015)*.
- 2015 Nguyen, T.-H. D., Carstensdottir, E., Ngo, N., Seif El-Nasr, M., Gray, M., Isaacowitz, D., and DeSteno, D.. Modeling Warmth and Competence in Virtual Characters. In *The Fifteenth International Conference on Intelligent Virtual Agents (IVA 2015)*, Delft, Netherlands.
- Nguyen, T.-H. D., Seif El-Nasr, M., and Canossa, A. Glyph: Visualization Tool for Understanding Problem Solving Strategies in Puzzle Games. In *The Foundation of Digital Games Conference 2015 (FDG 2015)*, Pacific Grove, California. [**Best Paper Award**, “Interaction, Player Experience and Games Education” Track] (top 3.78% of submissions)
- Melcer, E., Nguyen, T.-H. D., Chen, Z., Canossa, A., Seif El-Nasr, M., and Isbister, K. Games Research Today: Analyzing the Academic Landscape 2000-2014. In *The Foundation of Digital Games Conference 2015 (FDG 2015)*, Pacific Grove, California. [**Best Paper Award**, “Game Studies” Track] (top 3.78% of submissions)
- 2014 Nguyen, T.-H. D., Silander, T., Lee, W.-S., and Leong, T.-Y. Bootstrapping Simulation-Based Algorithms with a Suboptimal Policy. In *The 24th International Conference on Automated Planning and Scheduling (ICAPS 2014)*, Portsmouth, New Hampshire.
- 2013 Nguyen, T.-H. D., Varakantham, P., Lau, H.-C., and Cheng, S.-F. Interacting Knapsack Problem in Designing Resource Bundles. In *The 10th Metaheuristics International Conference (MIC 2013)*, Singapore.
- 2012 Nguyen, T.-H. D., Lee, W.-S., and Leong, T.-Y. Bootstrapping Monte Carlo Tree Search with an Imperfect Heuristic. In *The 2012 European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML/PKDD’12)*, Bristol, United Kingdom.
- 2011 Nguyen, T.-H. D., Hsu, D., Lee, W.-S., Leong, T.-Y., Kaelbling, L. P., Lozano-Perez, T., and Grant, A. H. CAPIR: Collaborative Action Planning with Intention Recognition. In *The 7th AAAI International Conference on Artificial Intelligence and Interactive Digital Entertainment (AIIDE’11)*, Palo Alto, California.
- 2009 Nguyen, T.-H. D. and Leong, T.-Y. A Surprise-Triggered Adaptive and Reactive Framework for Online Adaptation in Non-stationary Environments. In *The 5th AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment (AIIDE’09)*, Palo Alto, California.

Peer-Reviewed Workshop Papers

- 2015 Nguyen, T.-H. D., Richards, M., Seif El-Nasr, M., and Isaacowitz, D. A Visual Analytic System for Comparing Attention Patterns in Eye-Tracking Data. In the *First Workshop on Eye Tracking and Visualization (ETVIS 2015)*, Chicago, Illinois.
- 2014 Canossa, A., Seif El-Nasr, M., and Nguyen, T.-H. D. Beyond Visualization: Democratizing Access to Game Analytics Through Interactive Sense-making. In *CHI PLAY Game User Research Workshop 2014*, Toronto, Canada.
- Nguyen, T.-H. D., Subramanian, S., Seif El-Nasr, M., and Canossa, A. Strategy Detection in Wuzzit: A Decision Theoretic Approach. In *ICLS'14 Workshop on Learning Analytics for Learning and Becoming a Practice*, Boulder, Colorado.
- Seif El-Nasr, M., Nguyen, T.-H. D., Carstendottir, E., Gray, M., Isaacowitz, D., and DeSteno, D. (2014). Social gaming as an experimental platform. In *Social Believability in Games Workshop 2014 @FDG*, Ft. Lauderdale, Florida.

In Preparation

- Game Research Field Then and Now: Tracing the Evolution of Communities. *Entertainment Computing* (Elsevier).
- Using Inverse Reinforcement Learning for Player Behavior Understanding.

FELLOWSHIPS & AWARDS

- 2014 ICAPS Early Researcher Support, ICAPS 2014
- 2009-2012 Conference Travel Grant, NUS (AIIDE'09, AIIDE'11, ECML'12)
- 2009 NUS Hollywood Lab Internship, NUS Interactive and Digital Media Institute
- 2006-2010 Research Scholarship, NUS
- 2006 Most Entertaining Game, 24 Hour Game Design Competition, NUS

INVITED TALKS

- 2011 CAPIR: Collaborative Action Planning with Intention Recognition. Singapore-MIT GAMBIT Game Lab, MIT Campus, Boston, MA

CONFERENCE ACTIVITY

Paper Presentations

- 2015 Glyph: Visualization Tool for Understanding Problem Solving Strategies in Puzzle Games, *Foundation of Digital Games Conference 2015 (FDG 2015)*, Pacific Grove, California, June 21-25.
- 2014 Bootstrapping Simulation-Based Algorithms with a Suboptimal Policy, International Conference on Automated Planning and Scheduling, Portsmouth, NH, June 21-26.
- 2013 Interacting Knapsack Problem in Designing Resource Bundles, 10th Metaheuristic International Conference, Singapore, August 5-8.
- 2012 Bootstrapping Monte Carlo Tree Search with an Imperfect Heuristic, European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases, Bristol, UK, September 24-28.
- 2011 CAPIR: Collaborative Action Planning with Intention Recognition, AAAI International Conference on Artificial Intelligence and Interactive Digital Entertainment, Palo Alto, CA, October 12-14.
- 2009 A Surprise Triggered Adaptive and Reactive Framework for Online Adaptation in Non-stationary Environments, AAAI International Conference on Artificial Intelligence and Interactive Digital Entertainment, Palo Alto, CA, October 14-16.

Poster Presentations

- 2012 Bootstrapping Monte Carlo Tree Search with an Imperfect Heuristic, European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases, Bristol, UK, September 24-28.

TEACHING EXPERIENCE

Texas A&M University-Commerce, Instructor

Advanced Databases and Data Mining (fall 2015)

Northeastern University, Co-Instructor

Foundations of Artificial Intelligence (spring 2014)

National University of Singapore, Teaching Assistant

Operating Systems (spring 2007)

Programming Methodology in C (fall 2006)

Mathematics Teaching, Teaching Assistant

Education Program for Gifted Youth, Singapore (winter 2005, summer 2006)

RESEARCH EXPERIENCE

2010 - 2012 Research Assistant, School of Computing, National University of Singapore
2007 - 2008 Research Assistant, School of Computing, National University of Singapore

PROFESSIONAL SERVICE

Peer Review

Reviewer, CHI Play 2015
Reviewer, IEEE Trans. on Affective Computing, 2014-2015
Reviewer, CHI 2015 Student Game Competition, 2014-2015
Reviewer, Entertainment Computing (Journal), 2013-2015
Reviewer, IEEE Trans. on Computational Intelligence and AI in Games, 2013-2014
Reviewer, Machine Learning (Journal), 2013
Reviewer, AAI Conference on Artificial Intelligence, 2013
Reviewer, AAI International Conference on Artificial Intelligence and Interactive Digital Entertainment, 2013

To Profession

Organizing Helper, Global Game Jam at Northeastern University, Boston, MA, 2014-2015
Doctoral Consortium Mentor, International Conference on Automated Planning and Scheduling, Portsmouth, NH, 2014
Organizing Helper, AAI International Conference on Artificial Intelligence and Interactive Digital Entertainment, Boston, MA, 2013
Organizing Helper, Metaheuristic International Conference, Singapore, 2013
Organizing Helper, Asian Conference on Machine Learning, Singapore, 2012
Organizing Helper, Machine Learning Summer School, Singapore, 2011

RELATED PROFESSIONAL EXPERIENCE

2009 Technology Director, Labyrinth Project, University of Southern California, Los Angeles, CA

PROFESSIONAL ASSOCIATIONS

Association for the Advancement of Artificial Intelligence, 2009-2014

AREAS OF INTEREST

Research: Artificial Intelligence, Machine Learning, Data Analytics, Virtual Characters

Teaching: Artificial Intelligence, Machine Learning, Data Mining, Programming Methodology, Operating Systems

SKILLS

Programming Languages: Java, Python, JavaScript, Matlab, C#, C/C++

Game/Interactive Media Tools: Unity3D, Adobe Flash, GameMaker

LANGUAGES

English: Advanced reading, writing, speaking

Vietnamese: Advanced reading, writing, speaking

German: Medium reading, writing, Beginner speaking