

CV: Mr. Khoi-Nguyen Tran

CONTACT INFORMATION	PhD Candidate Research School of Computer Science The Australian National University Canberra, ACT 2601, Australia	<i>Office:</i> +61-(0)2-6125-1813 <i>Mobile:</i> +61-(0)424-316-544 <i>Email:</i> kndtran@gmail.com <i>WWW:</i> kndtran.com
RESEARCH INTERESTS	Detection of malicious activities in online environments: data mining, machine learning, big data, knowledge generation, vandalism on Wikipedia, malicious spam emails, and current trends and issues in cybercrime.	
EMPLOYMENT / RESEARCH	The Australian National University (ANU) , Canberra, ACT 2601, Australia	
	<ul style="list-style-type: none">● Research Assistant. Casual. November 2014 – Current ANU Cybercrime Observatory Regulatory Institutions Network (RegNet)<ul style="list-style-type: none">– Project: “Developing a Cybercrime Course for Undergraduate/Masters Students”– Supervisor: Professor Roderic Broadhurst– Assisting in developing informative and instructional learning materials, and problem based learning exercises for tutorials.– Identifying and compiling appropriate reading material for a reading brick.● Research Assistant. Casual. March 2013 – June 2014 ANU Cybercrime Observatory Regulatory Institutions Network (RegNet)<ul style="list-style-type: none">– Project: “Tracking Cybercrime Activities in Australia”– Supervisors: Dr. Mamoun Alazab, Professor Roderic Broadhurst– Led research into detecting spam emails with malicious attachments or URLs.– Processed 1 million+ attachments and 21 million+ URLs from all emails.– Developed novel detection technique for malicious content based on email content.– (See page 3.) Published [3] in the Australasian Data Mining Conference, a top-tier national data mining conference.● Research Assistant. Full-time. January 2011 – January 2012 Research School of Computer Science<ul style="list-style-type: none">– Project (funded by Google): “Preference Elicitation for Social Recommendation”– Co-investigator: Joseph Noel– Supervisors: Assoc. Prof. Peter Christen, Dr. Scott Sanner, Dr. Lexing Xie, Dr. Edwin Bonilla– Led development of Facebook app (LinkR) to collect user data for research on collaborative filtering for recommendation.– Recruited and supported over 200 participants in a 5 month user study.– Collected usage data from over 37,000 Facebook users and their friends.– (See page 3.) Published [7] novel recommendation algorithms and evaluation on real-world data in World Wide Web Conference, a top-tier international computer science conference.● Summer Research Scholar. Full-time. November 2009 – February 2010<ul style="list-style-type: none">– Project: “Tracking Citation Counts from Online Sources– Supervisor: Assoc. Prof. Peter Christen– Developed a Firefox plugin for tracking changes in citation counts of authors from Google Scholar.	

EMPLOYMENT / TEACHING	<p>The Australian National University (ANU), Canberra, ACT 2601, Australia</p> <ul style="list-style-type: none"> • <i>Teaching Assistant</i> July 2008 – July 2012 <ul style="list-style-type: none"> – Masters Course: Algorithms for Data Mining; Semester 1 of 2010, 2011, 2012. – Course: Advanced Databases and Data Mining; Semester 1 of 2009. – Course: Algorithms; Semester 2 of 2008. – Course: Concurrent and Distributed Systems; Semester 2 of 2008
EDUCATION	<p>The Australian National University (ANU), Canberra, ACT 2601, Australia</p> <ul style="list-style-type: none"> • Ph.D. (Awaiting thesis examinations results.) (Thesis submitted in) October 2014 <ul style="list-style-type: none"> – Area of Study: Machine learning and its applications – Thesis Title: <i>Detecting Vandalism on Wikipedia across Multiple Languages</i> – Supervisors: Assoc. Prof. Peter Christen, Dr. Scott Sanner, Dr. Lexing Xie – (See page 3.) Publications: [1], [2], [3], [4], [6]. • Bachelor of Computer Science, with First Class Honours December 2009 <ul style="list-style-type: none"> – GPA: 3.75/4; Overall course average of High Distinction. – Honours Thesis Topic: <i>Semantic Sensor Composition</i> <ul style="list-style-type: none"> * Supervisor: Dr. Michael Compton * 2 publications. – Individual Research Projects: <i>Detecting Network Anomalies</i> <ul style="list-style-type: none"> * Supervisor: Dr. Huidong (Warren) Jin * 2 publications.
SKILLS	<p>Languages:</p> <ul style="list-style-type: none"> • Experienced: Python, UNIX shell scripting, PHP, JavaScript, SQL • Familiar: Haskell, R, C, Java, MATLAB, C# <p>Software:</p> <ul style="list-style-type: none"> • Experienced: Scikit-learn (Python machine learning library), L^AT_EX, JQuery, MySQL • Familiar: Eclipse, Apache, SVN/Git, Ubuntu Linux, Microsoft Windows XP/7/8, Microsoft Word/Excel/Powerpoint
PERSONAL PROJECTS	<p>Online Personal Data Generator and Corruptor (GeCo)</p> <ul style="list-style-type: none"> • Personal project. Full-time. May 2013 <p>Research School of Computer Science</p> <ul style="list-style-type: none"> – Project: “Synthetic Data Generation and Corruption” – Supervisors: Assoc. Prof. Peter Christen, – Led development of a user-friendly Web interface for a prototype data generator and corruptor. – (See page 3.) Published as a demo in a top-tier international computer science conference [5]. <p>Microsoft Imagine Cup 2011</p> <ul style="list-style-type: none"> • Personal project. Free-time. February 2011 – June 2011 <ul style="list-style-type: none"> – Project: “Disaster Coordination using Social Networks” – Led a team of 2 developers and an artist to develop a prototype software system for the competition. We developed a mobile app for Windows Phone 7 (in C# using the Windows Phone developer tools) and a web app (in C# using .NET and Silverlight). – First and second round Australian finalist. Placed 4th at the Australian finals.

SELECTED
PUBLICATIONS

Google Scholar Profile:

<http://scholar.google.com.au/citations?user=ihFcT5QAAAAJ>

ResearchGate Profile:

https://www.researchgate.net/profile/Khoi_Nguyen_Tran

- [1] **Khoi-Nguyen Tran**, Peter Christen, Scott Sanner, and Lexing Xie. *Context-aware Detection of Sneaky Vandalism on Wikipedia across Multiple Languages*. In Proceedings of the 19th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD), Ho Chi Minh City, Vietnam, 2015.
- [2] **Khoi-Nguyen Tran** and Peter Christen. *Cross-Language Learning from Bots and Users to detect Vandalism on Wikipedia*. IEEE Transactions on Knowledge and Data Engineering (TKDE), 2014.
- [3] **Khoi-Nguyen Tran**, Mamoun Alazab, and Roderic Broadhurst. *Towards a Feature Rich Model for Predicting Spam Emails containing Malicious Attachments and URLs*. In Proceedings of the 11th Australasian Data Mining Conference (AusDM), Canberra, Australia, 2013.
- [4] **Khoi-Nguyen Tran** and Peter Christen. *Identifying Multilingual Wikipedia Articles based on Cross-Language Similarity and Activity*. In Proceedings of the 22nd ACM Conference of Information and Knowledge Management (CIKM): Poster, San Francisco, USA, 2013.
- [5] **Khoi-Nguyen Tran**, Dinusha Vatsalan, and Peter Christen. *GeCo - An Online Personal data Generator and Corruptor*. In Proceedings of the 22nd ACM Conference of Information and Knowledge Management (CIKM): Demo, San Francisco, USA, 2013.
- [6] **Khoi-Nguyen Tran** and Peter Christen. *Cross-Language Prediction of Vandalism on Wikipedia Using Article Views and Revisions*. In Proceedings of the 17th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD), Gold Coast, Australia, 2013.
- [7] Joseph Noel, Scott Sanner, **Khoi-Nguyen Tran**, Peter Christen, Lexing Xie, Edwin V. Bonilla, Ehsan Abbasnejad, and Nicolas Della Penna. *New Objective Functions for Social Collaborative Filtering*. In Proceedings of the 21st International World Wide Web Conference (WWW), Lyon, France, 2012.

OTHER
PUBLICATIONS

- [8] **Khoi-Nguyen Tran**. *Semantic Sensor Composition*. Honours Thesis. The Australian National University, 2009.

ACADEMIC
AWARDS

[The Australian National University](#)

- CSIRO ICT Scholarship for Computer Science, 2006–2009
- Boyapati Prize for 2nd Year Computer Science and Mathematics, 2007
 - Awarded to students obtaining a High Distinction (highest grade possible) in two computer science and two mathematics courses in their 2nd year of study.
- Dean’s List, 2009

SERVICE

[ANU Computer Science Students’ Association](#)

- Volunteer, 2007–2010
- President, 2011–2012
 - Total membership for 2011: 220+, for 2012: 300+.
 - Notable events: 20+ BBQs, 4 Epic Games Nights, 8 technical talks (incl. Kinect development workshop, and L^AT_EX workshops), 4 software installation events, and 2 membership recruitments.

- Winner of Event of the Year in 2012 for the Epic Games Night.
- Runner Up for Club of the Year in 2012.

Miscellaneous

- Volunteer, 2013, The Australasian Data Mining Conference
- Volunteer, 2011, Open Source Developers' Conference
- Microsoft Student Ambassador at the ANU, 2011–2012

REFERENCES AVAILABLE TO CONTACT

A. Prof. Peter Christen (email: peter.christen@anu.edu.au)

- Associate Professor, Research School of Computer Science
- The Australian National University, Canberra, ACT 2601, Australia
- *Assoc. Prof. Christen is my graduate supervisor and panel chair for my PhD candidacy.*

Prof. Roderic Broadhurst (email: roderic.broadhurst@anu.edu.au)

- Professor, College of Arts and Social Science
- The Australian National University, Canberra, ACT 2601, Australia
- *Prof. Broadhurst is my supervisor at the ANU Cybercrime Observatory for the project “Developing a Cybercrime Course for Undergraduate/Masters Students”.*

Dr. Mamoun Alazab (email: mamoun.alazab@anu.edu.au)

- Research Associate, College of Arts and Social Science
- The Australian National University, Canberra, ACT 2601, Australia
- *Dr. Alazab was my main supervisor for the project named “Tracking Cybercrime Activities in Australia”.*