Chong-U Lim

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EDUCATION

Ph.D., Candidate, Electrical Engineering & Computer Science   2013–2016
Massachusetts Institute of Technology, Cambridge, MA, USA
Thesis Title: Me, My Avatar(s), and AI: Computational Models of
Users and Virtual Identities for Analysis, Design, and Development
Advisor: Prof. D. Fox Harrell

Master of Science, Electrical Engineering & Computer Science   2011–2013
Massachusetts Institute of Technology, Cambridge, MA, USA
Advisor: Prof. D. Fox Harrell

Bachelor of Engineering, Computing   2006–2009
1st Class Honours
Imperial College London, London, United Kingdom
Advisor: Prof. Simon Colton

WORK EXPERIENCE

Lead Client Developer   Nov 2010 to August 2011
Playfish, Electronic Arts Interactive, London, United Kingdom
- Managed a team on one of the top social network games on Facebook.
- Worked with producers and product managers to lead the client development team in the implementation and development of gameplay features.

Game Developer   Sep 2009 to Oct 2010
Playfish, Electronic Arts Interactive, London, United Kingdom
- Implementing gameplay features and tools for hit social games on Facebook.
- Worked on the commercially successful Facebook game *Restaurant City*, which had more than 10 million monthly active users.

Gameplay Programmer Intern   Jun 2008 to Sep 2008
Kuju Entertainment, Sheffield, United Kingdom
- Worked on a commercial title, using the *Unreal Engine 3* (PC, Xbox 360, PS3).
- Worked on code maintenance, bug-fixing, downloadable content (DLC), and gameplay profiling.

TEACHING EXPERIENCE

Head Teaching Assistant   Spring 2015
6.005 Software Construction
Department of Electrical Engineering and Computer Science, MIT, Cambridge, USA
- Assisted with teaching a highly enrolled class of undergraduate students.
- Organized scheduling for other teaching and lab assistants.
- Implemented systems and software for managing classes and grading.

- Assisted in lesson planning, code-reviewing, and other related activities.

Teaching Assistant Fall 2014
6.005 Software Construction
Department of Electrical Engineering and Computer Science, MIT, Cambridge, USA
- Assisted with teaching a highly enrolled class of undergraduate students.
- Implemented systems and software for managing classes and grading.
- Graded individual student assignments.
- Assisted in lesson planning, code-reviewing, and other related activities.
- Mentored students for their group project.

Teaching Assistant Fall 2013
CMS.628/CMS.828 Advanced Identity Representation
Comparative Media Studies/Writing Program, MIT, Cambridge, USA
- Assisted with teaching a seminar-styled class of graduate and undergraduate students.
- Organized and planned readings, class activities and assignments.
- Re-factored and implemented framework for the semester-long project.

Teaching Assistant Spring 2013
6.813/6.831 UI Implementation & Design
Department of Electrical Engineering and Computer Science, MIT, Cambridge, USA
- Assisted with teaching a highly enrolled class of graduate and undergraduate students.
- Prepared in-class activities and programming lab assignments.
- Graded individual student assignments.
- Mentored students for their semester-long group projects.

Undergraduate Teaching Assistant Fall 2008–Spring 2009
Department of Computing, Imperial College London, London, United Kingdom
- Responsible for the preparation of Personal Programming Tutorial (PPT) sessions for first year undergraduate students.
- Assisted the assigned tutor with conducting tutorials, providing guidance, and monitoring the progress of students.
- Grading weekly lab assignments and providing feedback for the students.

RESEARCH INTERESTS   Artificial Intelligence, Computational Intelligence and Videogames, Data-driven Inference and Analytics, Machine Learning, Human-Computer Interaction, User Interface and User Experience Design, Digital Media Systems

AWARDS   *Singapore Challenge 2016 Finalist* 2016
Global Young Scientists Summit @ One-North 2016
The National Research Foundation of Singapore

NRF GYSS Nominated Participant 2016
Nominated by: Office of the Dean of Graduate Education (ODGE)
(Top-3 of All MIT Applicants) Massachusetts Institute of Technology
Global Young Scientists Summit @ One-North 2016
The National Research Foundation of Singapore

Travel Grant Award (Summer 2015) / USD $500.00   2015
Graduate Student Council
Massachusetts Institute of Technology

Travel Grant Award (Summer 2014) / USD $970.00   2014
Graduate Student Council
Massachusetts Institute of Technology

Travel Grant Award (Summer 2013) / USD $750.00   2013
Graduate Student Council
Massachusetts Institute of Technology

Social Networking Game of the Year   2012
The Sims Social
Academy of Interactive Arts and Sciences 2012

Performance Recognition Award   2010 & 2011
Playfish, Electronic Arts Interactive
In recognition for contributions to teamwork and development.

Departmental Prize for Excellence   2009
Imperial College London
Awarded to a final year student for outstanding overall performance.

Distinguished Project Prize   2009
Imperial College London
For outstanding individual project in terms of technical achievement and presentation.

Gloucester Research Prize   2008
Imperial College London
Awarded annually to up to ten non-final year students of each of the departments of
Computing, Mathematics and Physics for academic excellence.

PROFESSIONAL *Program Committee Member*   2016
SERVICE   3rd AIIDE Workshop on Experimental AI and Games
                 AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment,
                 San Francisco, CA, USA.

Program Committee Member   2016
12th Annual AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment, San Francisco, CA, USA.

Program Committee Member   2016
IEEE International Conference on Computational Intelligence and Games, Santorini, Greece.

Technical Program Committee Member   2016
8th Computer Science & Electronic Engineering Conference, Essex, United Kingdom.

Co-Organizer   2016
2nd Computational Creativity and Games Workshop
International Conference on Computational Creativity, Paris, France.

Program Committee Member   2015

2nd AIIDE Workshop on Experimental AI and Games
AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment,
Santa Cruz, CA, USA.

Technical Program Committee Member 2015
Special Session on Computational Intelligence and Games
7th Computer Science & Electronic Engineering Conference, Essex, United Kingdom.

Co-organizer 2015
1st Computational Creativity and Games Workshop
International Conference on Computational Creativity, Park City, UT, USA.

Program Committee Member 2015
6th FDG Workshop on Procedural Content Generation
International Conference on Foundations of Digital Games, Pacific Grove, CA, USA.

Invited Talk – Speaker 2014
Invited Graduate Student Speaker with Prof. D. Fox Harrell
Culture Coding: Thinking Identity, Expression and Computation
Visions and Voices, University of Southern California, CA, USA. Sep-29.

Program Committee Member 2014
1st AIIDE Workshop on Experimental AI for Games
AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment,
Raleigh, CA, USA.

Local Organizer 2013
DAGGER: Game Development & Academic Demo Night
1st AIIDE Workshop on Artificial Intelligence and Game Aesthetics

Program Committee Member 2013
1st AIIDE Workshop on Artificial Intelligence and Game Aesthetics
AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment

Publications

REFEREED JOURNAL ARTICLES
Diego Perez, Spyridon Samothrakis, Julian Togelius, Tom Schaul, Simon Lucas, Adrien Couetoux, Jerry Lee, Chong-U Lim and Tommy Thompson 2015
"The 2014 General Video Game Playing Competition" *IEEE Transactions on Computational Intelligence and AI in Games*, PP(99). 15 pp.

D. Fox Harrell, Chong-U Lim, Sonny Sidhu, Ayse Gursoy, and Jia Zhang 2013
"Playing Mimesis: Engendering Understanding Via Experience of Social Discrimination with an Interactive Narrative Game," *Electronic Book Review.* Nov 2, 2014.

CONFERENCE PROCEEDINGS
Chong-U Lim, Antonios Liapis, and D. Fox Harrell 2016
"Discovering Social and Aesthetic Categories of Avatars: A Bottom-Up Artificial Intelligence Approach Using Image Clustering" *Proceedings of the 1st International Joint Conference on DiGRA and FDG*, Dundee, Scotland. Aug 01 – Aug 06. 16 pp.

Chong-U Lim and D. Fox Harrell 2015

"A Data-Driven Approach for Computationally Modeling Players' Avatar Customization Behaviors" *Proceedings of the AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment*, Santa Cruz, CA, USA, Nov 14 – Nov 18. 7 pp.

Chong-U Lim and D. Fox Harrell   2015
"Understanding Users' Identities and Behavioral Archetypes from Avatar Customization Data" *Proceedings of the IEEE Conference on Computational Intelligence and Games*, Tainan, Taiwan, Aug 31 – Sep 2. 8 pp.

Chong-U Lim and D. Fox Harrell   2015
"Developing Computational Models of Players Identities and Values from Videogame Avatars" *Proceedings of the Foundations of Digital Games Conference*, Pacific Grove, CA, USA, Jun 22 – Jun 25. 5 pp.

Chong-U Lim and D. Fox Harrell   2015
"Revealing Social Phenomena in Videogames using Archetypal Analysis" *Proceedings of the 5th AISB Symposium on Artificial Intelligence and Games*, Kent, Canterbury, England, United Kingdom, Apr 20. 6 pp.

Chong-U Lim and D. Fox Harrell   2015
"Toward Telemetry-driven Analytics for Understanding Players and their Avatars in Videogames" *In CHI'15 Extended Abstracts, Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems*, Seoul, South Korea Apr 18 – Apr 23. pp. 1175–1180.

Chong-U Lim and D. Fox Harrell   2014
"Developing Social Identity Models of Players from Game Telemetry Data" *Proceedings of the AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment*, Raleigh, NC, USA Oct 3 – Oct 7. pp. 125 – 131.

Chong-U Lim and D. Fox Harrell   2014
"An Approach to General Videogame Evaluation and Automatic Generation using a Description Language" *Proceedings of IEEE Conference on Computational Intelligence and Games*, Dortmund, Germany, Aug 26 – Aug 29. pp. 286–293.

D. Fox Harrell, Dominic Kao, Chong-U Lim, et al.   2014
"Authoring Conversational Narratives in Games with the Chimeria Platform," *Proceedings of the Foundations of Digital Games Conference*, Ft. Lauderdale, FL, USA, Apr 3 – Apr 7. 8 pp. ***Exemplarary Paper***.

D. Fox Harrell, Dominic Kao, Chong-U Lim, et al.   2014
"The Chimeria Platform: User Empowerment through Expressing Social Group Membership Phenomena," *Proceedings of Digital Humanities Conference*, Lausanne, Switzerland, Jul 8 – Jul 12. 7 pp.

Chong-U Lim, and D. Fox Harrell   2013
"Modeling Player Preferences in Avatar Customization using Social Network Data," *Proceedings of the IEEE Conference on Computational Intelligence and Games*, Niagara Falls, Canada, Aug 11–Aug 13. pp. 153–160.

D. Fox Harrell, Chong-U Lim, Jia Zhang, and Dominic Kao   2013
"The Living Liberia Fabric: An Interactive Narrative Artwork Memorializing Civil War in Liberia," *Proceedings of the International Symposium on Electronic Art*, Sydney, Australia, Jun 7–Jun 16.

Chong-U Lim, Robin Baumgarten, and Simon Colton.   2010
"Evolving Behaviour Trees for the Commercial Game DEFCON," *Applications of Evolutionary Computation*, pp. 100-110. Springer Berlin Heidelberg,
*Best Paper Nominee (Evo*Games Track)*.

WORKSHOP   Chong-U Lim and D. Fox Harrell   2015
PAPERS   "Comparing Clustering Approaches for Modeling Players' Values through Avatar Construction" *Proceedings of the 1st AIIDE Workshop on Player Modeling*, Santa Cruz, CA, USA, Nov 14 – Nov 15. 7 pp.

Chong-U Lim and D. Fox Harrell   2015
"*The Marginal*: A Game for Modeling Players' Perceptions of Gradient Membership in Avatar Categories" *Proceedings of the 2nd AIIDE Workshop on Experimental AI and Games*, Santa Cruz, CA, USA, Nov 14 – Nov 15. 7 pp.

D. Fox Harrell, Dominic Kao, and Chong-U Lim   2013
"Computationally Modeling Narratives of Social Group Membership with the Chimeria System," *Proceedings of the 2013 Workshop on Computational Models of Narrative a satellite workshop of CogSci 2013: The 35th meeting of the Cognitive Science Society*, Berlin, Germany, Jul 31-Aug 3. pp. 123-128.

JURIED   D. Fox Harrell, Dominic Kao, and Chong-U Lim   2015
EXHIBITIONS & "Toward Understanding Real-World Social Impacts of Avatars" *Electronic Literature*
DEMOS   *Organization Conference*, Bergen, Norway, Aug 5 – Aug 7. 1 pp.

D. Fox Harrell, Dominic Kao, Chong-U Lim, et al.   2014
"Stories of Stigma and Acceptance Using the Chimeria Platform," *2014 Conference of the Electronic Literature Organization*, Milwaukee, WI, USA, Jun 19 – Jun 21.

D. Fox Harrell, Dominic Kao, Chong-U Lim, et al.   2014
"Modeling Social Group Membership Using an Interactive Narrative Authoring Platform," *7th Workshop on Intelligent Narrative Technologies*, Milwaukee, WI, USA, Jun 19 – Jun 21. 1 pp.

D. Fox Harrell, Chong-U Lim, Sonny Sidhu, et al.   2012
"Exploring Everyday Creative Responses to Social Discrimination with the Mimesis System," Demo Abstract, *Proceedings of the 2012 International Conference on Computational Creativity*, Dublin, Ireland, May 30-Jun 1.