Yi-Chun Chen (Rimi)

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Education

Doctor of Philosophy in Computer Science | August 2015 – Expected graduation date: December 2020
North Carolina State University (NCSU), Raleigh, NC | GPA: 3.56/4.0

Master of Science in Computer Science | September 2011 – July 2013
National Tsing Hua University (NTHU), Hsinchu, Taiwan | GPA: 4.17/4.3

Bachelor of Science in Computer Science | September 2007 – June 2011
National Tsing Hua University (NTHU), Hsinchu, Taiwan | GPA: 80.9/100

Research Projects & Work Experiences

Ph.D. Student | September 2015 – Present
ARNAV Lab—North Carolina State University, US; Advisor: Dr. Arnav Jhala
Email visualization: "A visualization interface for large scale mail data and APIs for general data visualization."
- Designed and implemented a web tool to provide data filters for visualizing data interactively and application program interfaces for different data attributes.

Reading comprehension task: "A planning-based pipeline to infer the missing part in story text."
- Combined the verb predicates in Verbnet with planning concept and framework to make system figure out the missing content through preconditions and postconditions.
  Publication: *" Abstractions for Narrative Comprehension Tasks,"* 2018, Intelligent Narrative Technologies (INTWICED) at AIIDE.

Large Scale Novel Visualization: "A web tool to display the large scale text on walls or large screen"
- Designed a web tool to visualize story text where the jumping between content interactions, switching focus functions, and the sentiment of text were provided.

Comic Generator: "An action relations and transitions based generator for generating comic panel sequences."
- Integrated Visual Narrative Grammar with actions' casual relation network to automatically generate comic sequences.

V-SET: "An authoring tool for generating Narrative Adventure Game."
- Provided a user interface that allows authors to modify characters, scenes, event choices, and story contents in narrative adventure games and the functions to render from scripts to visual results.

Course projects
- Game Engine: implemented a function library that provides the basic ability of a game engine: event system, game object model, updating model, data structures, etc., and few sample games.
- Game AI project: designed and developed a multi-agent game Spot!Me that the player's goal is to escape from the non-player characters' cooperated hunting.

Research Assistant | May 2014 – June 2015
Institute of Information Science—Academia Sinica, Taiwan; Advisor: Dr. Jane Win-Shih Liu
OpenISDM Project: "An open framework for disaster management information systems."
- Developed a distributed, event-triggered, active notification service IASS (Intelligent Active Storage Service) and the program interfaces for disaster scenarios data and capture device records.

Research Assistant | January 2011 – July 2013
Researches in Artificial Intelligence Lab—NTHU, Taiwan; Advisor: Dr. Von-Wun Soo
- Integrated reinforcement learning with task allocation to distribute complex tasks in large-scale networks and conducted experiments.
  Thesis: "Oracle Learning for Agent Negotiation Based on Rationality in Task Allocation Problem."

National Energy Project: "Studies of automated coordination and self-healing based on multi-intelligent agent systems in smart-grids."
- Purposed a task allocation solution for power restoration problems in multi-agents system through intelligent agents' self-adaptability.
  Publication: *"Stochastic Negotiation with Market Utility for Automated Power Restoration on a Smart Grid,"* 2012, Workshop on Agent Technologies for Energy Systems (ATES) at AAMAS.

Undergraduate Researcher | January 2010 – November 2010
Student Cluster Competition (SCC), New Orleans, LA; Advisor: Dr. Yeh-Ching Chung
- Analyzed bottlenecks and predicted execution time of Weather Research & Forecasting Model (WRF), and tuned the system performance accordingly.

Award and Other Experiences

Competition, Supercomputing 2010 (SC10) Conference: Student Cluster Competition Overall Winner | November 2010

Volunteer, Recording Books Service Center for the Blind, NTHU, Taiwan | September 2007 – January 2008

Teaching Assistant, Foundations of Interactive Game Design, NCSU, Raleigh, NC. | September 2015 – Present