CEN WANG

Room 254, 140 Governors Dr, Amherst, MA 01003
cenwang@umass.edu | (617) 650-8462 | https://cenwangumass.github.io/

RESEARCH INTERESTS

- AI for simulation: application of artificial intelligence and machine learning techniques to automated creation of simulation models and enhancement of simulation quality
- Systems for simulation: design and development of simulation runtime systems that transparently improve simulation performance
- Simulation application: improvement of real-world systems in areas such as healthcare, logistics, finance, etc.

EDUCATION

University of Massachusetts Amherst — Amherst, MA
Ph.D. student in Computer Science — Expected May 2024
Advisor: Peter J. Haas
GPA: 4.0/4.0

University of Massachusetts Amherst — Amherst, MA
M.S. in Computer Science — May 2019
GPA: 4.0/4.0

Shanghai Jiao Tong University — Shanghai, China
B.S.E. in Aeronautics and Astronautics Engineering — June 2015
Thesis: Vision-based Indoor Positioning Algorithm for Quadrotors
Advisor: Shiqian Liu
GPA: 3.3/4.0

PUBLICATIONS

Refereed Conference Proceedings Papers

1. NIM: Modeling and generation of simulation inputs via generative neural networks. **W. Cen**, E. A. Herbert, P. J. Haas. Proc. 2020 Winter Simulation Conference, to appear.
2. NIM: Generative Neural Networks for Simulation Input Modeling (Extended Abstract and Poster). **W. Cen**, E. A. Herbert, P.J. Haas. 2019 Winter Simul. Conf., National Harbor, MD, December, 2019.
3. NIM: Generative Neural Networks for Modeling and Generation of Simulation Inputs. E. A. Herbert, **W. Cen**, P.J. Haas. 2019 Summer Simul. Conf., Berlin, July, 2019.

AWARDS AND RECOGNITION

WSC Best Contributed Theoretical Paper Finalist — December 2020
2021 IBM PhD Fellowship Finalist — October 2020

PROFESSIONAL EXPERIENCE

Fantwan Inc. (startup funded by IDG Ventures) — Shanghai, China
Co-founder and CTO — October 2014 – June 2016

- Researched and productionized machine learning algorithms for personalized food recommendation on Apache Spark
- Launched Food & Restaurant Search: architected Elasticsearch indexing pipeline, configured analyzers and optimized search relevance
- Designed and developed RESTful APIs for food recommendation, high volume usage statistics collection and payment processing
- Designed and developed PostgreSQL - Apache Kafka change data capture system
- Introduced modern DevOps practices to simplify server configuration, testing, continuous integration and deployment

TEACHING EXPERIENCES

Teaching Assistant for COMPSCI 590M Introduction to Simulation — Spring 2020, 2021
Grader for COMPSCI 590S Systems for Data Science — Fall 2018
Grader for COMPSCI 630 Systems — Spring 2018

TECHNICAL SKILLS

Programming Languages — Python, Rust, C, C++, Java, JavaScript, SQL
Machine Learning — PyTorch, TensorFlow, Apache Spark, scikit-learn
Web Development — Django, Flask, SQLAlchemy
Databases — PostgreSQL, MySQL, MongoDB, Elasticsearch
Tools — Git, Ansible, Docker