

Run Wang

runw@clemson.edu | +1 (518) 961-8733 | Clemson, SC | runwang123.github.io

EDUCATION

Clemson University

Ph.D. Student in Computer Science

– Concentration: 3D Computer Vision and Trustworthy AI for Autonomous Vehicles

Clemson, SC

Aug. 2025 – Present

Carnegie Mellon University

M.S. in Electrical and Computer Engineering (Applied Advanced Program)

Pittsburgh, PA

Sep. 2021 – May 2023

Rensselaer Polytechnic Institute

B.S. in Computer & Systems Engineering

Troy, NY

Sep. 2017 – May 2021

SKILLS

Programming: C, C++, C#, Python (PyTorch), Java

Tools & Frameworks: Docker, Kubernetes, Terraform, Hugging Face

Research Areas: Deep Learning, Autonomous Driving, Mobile Computing

PUBLICATIONS AND ACKNOWLEDGEMENTS

R. Wang et al., “FlexMap: Generalized HD Map Construction from Flexible Camera Configurations.”

Under Review.

Z. Wang, M. Kim, **R. Wang et al.**, “Design Diagnosis Using LLMs: A Case Study of Recreational Fishing Choice Experiments”

Under Review.

C. Zhou, **R. Wang et al.**, “FF3R: Feedforward Feature 3D Reconstruction from Unconstrained Views.”

Under Review.

R. Wang et al., “Lightweight Detection of Abnormal Battery Drain Induced by Network Operations of Mobile Apps.”

IEEE INFOCOM, 2026. **Acceptance Rate: 329/1740 (18.91%)**

R. Wang et al., “MAPP: Predictive UI View Pre-caching for Improving the Responsiveness of Mobile Apps.”

IEEE/ACM IWQoS, 2025. **Acceptance Rate: 81/326 (24.8%)**

W. Zhang et al., “Component Segmentation of Engineering Drawings Using Graph Convolutional Networks.”

Computers in Industry, vol. 147, Art. no. 103885, 2023. (Acknowledged Contributor)

RESEARCH EXPERIENCE

Graduate Research Assistant

Clemson University

Aug. 2025 – Present

Clemson, SC

- Supervisors: Dr. Siyu Huang and Dr. Mert D. Pesé
- Conducting research on 3D computer vision and trustworthy AI for autonomous driving systems.

Graduate Research Associate

The Ohio State University

May 2024 – Aug. 2025

Columbus, OH

- Supervisor: Prof. Xiaorui Wang
- Designed machine learning models and time-series algorithms for mobile and edge performance optimization.
- Two papers are accepted by IEEE IWQoS 2025 and IEEE INFOCOM 2026.

Research Assistant

CERLAB, Carnegie Mellon University

May 2022 – May 2023

Pittsburgh, PA

- Supervisors: Prof. Kenji Shimada and Dr. Wentai Zhang
- Developed deep learning methods for component extraction from engineering drawings.
- Adapted PSPNet, DeepLabV3+, and SketchGNN, achieving 84% overall accuracy.

Research Assistant

CyLab, Carnegie Mellon University

Jan. 2022 – May 2022

Pittsburgh, PA

- Supervisor: Dr. Cai Yang

- Collected and analyzed 80+ Linux-based malware samples via dynamic system-level tracing.
- Constructed an in-house behavioral dataset with 14 discriminative features.

Research Assistant

Jan. 2020 – Dec. 2020

RPI-IBM Cognitive and Immersive Systems Lab

Troy, NY

- Supervisors: Dr. Jeff Kephart and Dr. Xiangyang Mou
- Implemented a real-time gesture recognition system using C# and Python with Intel RealSense cameras.
- Collected 600+ gesture samples and extracted skeletal motion features.

INDUSTRY EXPERIENCE

Application Developer – Full Stack

May 2023 – Apr. 2024

Computer Packages Inc.

Rockville, MD

- Supported migration from legacy systems to modern architectures while ensuring data integrity.
- Optimized SQL Server queries using stored procedures and execution plan tuning.

PROJECT EXPERIENCE

User Recommendation Microservice

Aug. 2022 – Dec. 2022

AWS, Kubernetes, Spark, FastAPI, Vert.x

- Developed Spark-based ETL pipelines to preprocess ~1TB Twitter dataset on GCP Dataproc.
- Orchestrated AWS infrastructure and achieved 10,000 RPS within \$0.7/hr budget.