

Run Wang

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EDUCATION

Clemson University <i>Ph.D. Student in Computer Science</i> – Concentration: 3D Computer Vision and Trustworthy AI for Autonomous Vehicles	Clemson, SC Aug. 2025 – Present
Carnegie Mellon University <i>M.S. in Electrical and Computer Engineering (Applied Advanced Program)</i>	Pittsburgh, PA Sep. 2021 – May 2023
Rensselaer Polytechnic Institute <i>B.S. in Computer & Systems Engineering</i>	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 <i>Clemson University</i> – Supervisors: Dr. Siyu Huang and Dr. Mert D. Pesé – Conducting research on 3D computer vision and trustworthy AI for autonomous driving systems.	Aug. 2025 – Present Clemson, SC
Graduate Research Associate <i>The Ohio State University</i> – 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.	May 2024 – Aug. 2025 Columbus, OH
Research Assistant <i>CERLAB, Carnegie Mellon University</i> – 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.	May 2022 – May 2023 Pittsburgh, PA
Research Assistant <i>CyLab, Carnegie Mellon University</i> – Supervisor: Dr. Cai Yang	Jan. 2022 – May 2022 Pittsburgh, PA

- 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

Troy, NY

RPI-IBM Cognitive and Immersive Systems Lab

- 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

Rockville, MD

Computer Packages Inc.

- 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.