

# Dong Jia

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## RESEARCH INTEREST

### **UAV-Aided Network Deployment and Resource Allocation Using Digital Twins**

Digital twins modeling with AI, UAV-assisted network deployment, and joint optimization.

### **AI-Enabled Computing and Networking for Future Wireless Applications**

Edge computing, edge AI, end-edge-cloud interplay, joint networking slicing and computing task offloading.

## EDUCATION

### **Doctor of Philosophy (Ph.D.), Electrical Engineering**

Sept. 2024 – Present

### **Master of Science (M.Sc.), Electrical Engineering**

Sept. 2023 – Aug. 2024

University of Calgary, Calgary, AB, Canada

### **Bachelor of Engineering (B.E.), Software Engineering**

Sept. 2016 – Jun. 2020

Shandong University, Jinan, Shandong, China

## EMPLOYMENT

### **Rust Quantitative Trading Developer**

Feb. 2023 – Jul. 2023

Feitu Co., Ltd., Shanghai, China

Duties: Develop the quantitative trading platform  
and provide technical support to customers.

### **Software Engineer**

Jul. 2020 – Apr. 2022

Pinduoduo Inc., Shanghai, China

Duties: Develop and maintain scalable back-end services  
for a platform used by millions.

### **AI Platform Development Internship**

Jul. 2019 – Nov. 2019

Huya Inc., Guangzhou, China

Duties: Develop the Image Labeling Platform  
and deploy monitoring systems on Kubernetes clusters.

## PUBLICATION

### **Refereed Conference Papers**

[C1] **D. Jia** and Q. J. Ye, “Mobility-Adaptive Digital Twin Modeling for Post-Disaster Network Traffic Prediction,”  
*IEEE VTC-Fall’24 – IEEE 100th Vehicular Technology Conference*, Washington DC, USA, Oct. 2024.

## RESEARCH EXPERIENCE

### **Graduate Student**

Sept. 2023 – Now

Department of Electrical and Software Engineering  
University of Calgary, Calgary, Canada.

### **✓ Digital-Twin-Enabled Intelligent Network Deployment**

- Digital twin modeling for network environments using machine learning methods
- Network deployment based on constructed digital twin models

**Undergraduate Research Assistant****May 2017 – Dec. 2018**

School of Software

Shandong University, Jinan, China.

**✓ Machine Learning for Heart Disease Detection**

- Literature review on existing methods
- Model reproduction and prototype development

**SKILLS****Programming Languages:**

Rust, Python, Java, C/C++, and Go.

**Systems/Softwares:**

Kubernetes, Prometheus, MySQL, Apache Kafka, gRPC, and Linux.

**HONORS and AWARDS**

- IEEE Vehicular Technology Society Student Travel Award, Washington DC, USA, Oct. 7-10, 2024.
- National Motivational Scholarship (twice), Shandong University, China, 2017-2019.
- Outstanding Graduated Thesis, Shandong University, China, 2020.

**TEACHING EXPERIENCE****Teaching Assistant****Jan. 2024 – Dec. 2024**

Department of Electrical and Software Engineering, University of Calgary

Undergraduate course: ENSF 444 “Machine Learning Systems”

Undergraduate course: ENSF 462 “Networked Systems”

Duties: Lab supervision, Q&amp;A support, and assignment grading.