

SIXUAN DANG

Department of Computer Science
Duke University
sd570@duke.edu, lastfeynman.github.io

AREA OF INTEREST

Information Flow, Static Analysis, Side-channels, Security & Privacy

EDUCATION

- Duke University** 2023 - present
Ph.D. in Computer Science
Department of Computer Science
- Penn State University** 2022 - 2023
Ph.D. in Computer Science and Engineering
Department of Computer Science and Engineering
- University of Electronic Science and Technology of China** 2019 - 2022
M.S. in Software Engineering
School of Computer Science and Engineering
Thesis: Research on Personal Credit Incentives in Sharing Economy
- University of Electronic Science and Technology of China** 2015 - 2019
B.Eng. in Software Engineering
School of Information and Software Engineering
Thesis: Research on Document Template Generation Software based on Natural Language Processing

PUBLICATIONS

- CtChecker: a Precise, Sound and Efficient Static Analysis for Constant-Time Programming** 2024
Q. Zhou, **S. Dang**, D. Zhang
European Conference on Object-Oriented Programming (ECOOP 2024)
- A Behavior-Aware Scheme for Personalized Credit Computing** 2022
S. Dang, S. Cao
IEEE International Conference on Computer Supported Cooperative Work in Design (CSCWD 2022)
- Dynamic Incentive Mechanism Design for Regulation-Aware Systems** 2021
S. Dang, S. Cao, J. Li, X. Zhang JCR: Q1
International Journal of Intelligent Systems IF: 8.709
- Regulation-as-a-Service: Model Checking for Decision-Making Behaviors in Price-Sensitive Service Systems** 2021
S. Dang, S. Cao Code: [Github](#)
IEEE International Conference on Services Computing (SCC 2021)
- A Blockchain-based Access Control and Intrusion Detection Framework for Satellite Communication Systems** 2021
S. Cao, **S. Dang**, Y. Zhang, W. Wang, N. Cheng JCR: Q2
Computer Communications IF: 3.167

An Electric Vehicle Charging Reservation Approach Based on Blockchain
S. Cao, **S. Dang**, X. Du, M. Guizani, X. Zhang, X. Huang
IEEE Global Communications Conference (Globecom 2020)

2020

PATENTS

Routing Node Selection Method and Apparatus for Cross-Blockchain Transaction *Granted*
S. Cao, Q. Zhang, G. Xiong, **S. Dang**, R. Chen, T. Chen, X. Zhang 2021
China National Intellectual Property Administration (ZL202110942516.8)

Insurance Compensation Apparatus and Method based on Hybrid Smart Contracts *Granted*
S. Cao, Q. Zhang, **S. Dang**, G. Xiong, H. Chen, J. Yang, S. Niu, Z. Yang 2021
China National Intellectual Property Administration (ZL202110835114.8)

An Incentive Mechanism Method for Decision-Making *Granted*
S. Cao, **S. Dang**, Q. Zhang, G. Xiong, J. Yang, H. Chen, S. Niu, Z. Yang 2021
China National Intellectual Property Administration (ZL202110835181.X)

TEACHING ASSISTANT

COMPSCI 250D: Computer Architecture *Duke 2024Fall*

COMPSCI 390: Programming Language Concepts *Duke 2024Spring*

Data Structure and Algorithm Design (Undergraduate Student) *UESTC 2020Spring*

Network Programming and Blockchain (International Student) *UESTC 2020Spring*

PRESENTATIONS & TALKS

A Behavior-Aware Scheme for Personalized Credit Computing *May 2022*
IEEE International Conference on Computer Supported Cooperative Work in Design (CSCWD 2022)

Regulation-as-a-Service: Model Checking for Decision-Making Behaviors in Price-Sensitive Service Systems *September 2021*
IEEE International Conference on Services Computing (SCC 2021)

Security for Blockchain-based Satellite Communication (Invited Talk) *December 2020*
Annual Symposium of Blockchain Storage and Trade Engineering Laboratory of Sichuan Province

INTERNSHIP

Chengdu Huayp Co., Ltd *2019/03 - 2019/06*
Software Engineer

- Understand basics of natural language processing
- Design and implement a legal document template generation system based on NLP

Chengdu Tianheng-uestc Co., Ltd *2018/06 - 2018/09*
Full-stack Engineer

- Learn to employ Springboot to build website

- Design and implement the security module of the company's core product with Apache Shiro
- Design and implement a document consistency and correctness checking system

SI-TECH Information Technology Co.,Ltd

2017/06 - 2017/07

Full-stack Engineer

- Design and implement an online music streaming website with native Java servlet and jsp
- Design and implement a distance-based music recommendation system

AWARDS & HONORS

ACM SIGPLAN PAC Grant	<i>2023</i>
PLMW@PLDI 2023 Scholarship from ACM SIGPLAN	<i>2023</i>
Outstanding Graduate from Sichuan Province	<i>2021</i>
Outstanding Graduate from UESTC	<i>2021</i>
National Scholarship from Ministry of Education of China (ranked 4/13)	<i>2021</i>
The First Prize Scholarship from UESTC (ranked 1/256)	<i>2021</i>
The Third Prize Scholarship from UESTC	<i>2019</i>

REVIEWER

Computer Communications, International Journal of Intelligent Systems