

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

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 2020
S. Cao, S. Dang, X. Du, M. Guizani, X. Zhang, X. Huang
IEEE Global Communications Conference (Globecom 2020)

PATENTS

Routing Node Selection Method and Apparatus for Cross-Blockchain Transaction	<i>Granted</i>
S. Cao, Q. Zhang, G. Xiong, S. Dang , R. Chen, T. Chen, X. Zhang	2021
<i>China National Intellectual Property Administration (ZL202110942516.8)</i>	
Insurance Compensation Apparatus and Method based on Hybrid Smart Contracts	<i>Granted</i>
S. Cao, Q. Zhang, S. Dang , G. Xiong, H. Chen, J. Yang, S. Niu, Z. Yang	2021
<i>China National Intellectual Property Administration (ZL202110835114.8)</i>	
An Incentive Mechanism Method for Decision-Making	<i>Granted</i>
S. Cao, S. Dang , Q. Zhang, G. Xiong, J. Yang, H. Chen, S. Niu, Z. Yang	2021
<i>China National Intellectual Property Administration (ZL202110835181.X)</i>	

TEACHING ASSISTANT

COMPSCI 390: Programming Language Concepts	<i>Duke 2024Spring</i>
Data Structure and Algorithm Design (Undergraduate Student)	<i>UESTC 2020Spring</i>
Network Programming and Blockchain (International Student)	<i>UESTC 2020Spring</i>

PRESENTATIONS & TALKS

A Behavior-Aware Scheme for Personalized Credit Computing	<i>May 2022</i>
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	<i>September 2021</i>
IEEE International Conference on Services Computing (SCC 2021)	
Security for Blockchain-based Satellite Communication (Invited Talk)	<i>December 2020</i>
Annual Symposium of Blockchain Storage and Trade Engineering Laboratory of Sichuan Province	

INTERNSHIP

Chengdu Huayp Co., Ltd	<i>2019/03 - 2019/06</i>
<i>Software Engineer</i>	
<ul style="list-style-type: none">• Understand basics of natural language processing• Design and implement a legal document template generation system based on NLP	
Chengdu Tianheng-uestc Co., Ltd	<i>2018/06 - 2018/09</i>
<i>Full-stack Engineer</i>	
<ul style="list-style-type: none">• 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	<i>2017/06 - 2017/07</i>
<i>Full-stack Engineer</i>	
<ul style="list-style-type: none">• 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