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| **Shuo Liu**  E-mail: ninomyemail@gmail.com  Phone: (+XX) xxx xxxx xxxx  Website: https://github.com/LovelyBuggies | |
| **Education Background**  **Publications**  **Publications**  **(under review)**  **Academic Experience**  **Internship Experience**  **Skills**  **Extracurricular Activities**  **Honors & Awards** | **Expected 06/2020** **Sun Yat-sen University (SYSU)** **| GPA: 3.6/4.0**  Degree: Bachelor [of](C:/Program%20Files%20(x86)/Youdao/Dict/6.3.69.8341/resultui/frame/javascript:void(0);) [Engineering](C:/Program%20Files%20(x86)/Youdao/Dict/6.3.69.8341/resultui/frame/javascript:void(0);) in Software Engineering     * **Shuo Liu**, *“Application of Blockchain in IoT Data Trust and Information Available Technology”*, 2019 International Symposium on Computational Intelligence and Design. * **Shuo Liu**, *“Optimal Analysis of Target Dynamic Tracking Strategy Based on Computer Vision”*, 2019 International Conference on Electronic Information Technology and Computer Engineering. * Rui Xi, Kang Liu, **Shuo Liu**, Wuhui Chen, Shenghui Li, *“Perishable Digital Goods Trading Mechanism for Blockchain-based Vehicular Network”*, 2019 IEEE International Symposium on Parallel and Distributed Processing with Applications. * **Shuo Liu**, Kang Liu, Yuanhao Yang, Wuhui Chen, *“Blockchain-Based Digital Goods Trading Mechanism in Internet of Vehicles: A Stackelberg Game Approach”*, submitted to 2020 IEEE International Conference on Cloud Computing, under review. * **Shuo Liu\***, Rui Xi\*, Yuanhao Yang, Junwei Yao, Wuhui Chen, *“Time is Money: A Location-dependent Mobile Edge Computing Framework”*, submitted to IEEE Transaction on Mobile Computing publication (Journal Citation Report Q1 rank 24/274), under review. * Ting Cai, Zicong Hong, **Shuo Liu**, Wuhui Chen, Zibin Zheng, *“BCShare: A Decentralized Social Data Storage and Sharing on Blockchains”*, submitted to IEEE Transactions on Services Computing (Journal Citation Report Q1 rank17/274), under review.   **09/2019-Present Decentralized Social Data Storage and Sharing**   * Abstract: Developed a distributed data storage and sharing framework for social web users based on Blockchain for transactions and InterPlanetary File System (IPFS) for off-chain storage * Employed certificateless cryptography to achieve a web id-enabled authentication modular * Leveraged IPFS as an off-chain storage repository to help store and encrypt the media data * Implemented smart contracts for recording transactions about trading and sharing among web users   **12/2018-06/2019 Blockchain-Based** **Digital Goods Trading Mechanism**   * Abstract: Proposed a decentralized digital goods trading mechanism in Internet of Vehicles (IoV) by using a Game Theory approach * Applied consortium Blockchain to establish a secure and trustworthy decentralized system in the hybrid IoV scenario, including the roles of aggregators and nodes * Designed a novel mechanism to motivate each party, *i.e.*, the provider, consumer and relay, to participate in trading via two-layer Stackelberg Game approach   **12/2017-03/2018 Optimized Target Dynamic Tracking Strategy**   * Abstract: Proposed a novel method to dynamically capture and track target timely * Improved the diversity of particles and the accuracy of target via Back Propagation Neural Network * Prevented particle degradation and efficiently found the global optimal solution of particle information via Particle Swarm Optimization     **07/2019-11/2019 Microsoft (China) Co., Ltd**  PARFAIT project — PredictAble RDMA For AI Training   * Abstract: Constructed a multi-tenancy and bandwidth-guaranteed distributed deep learning training prototype in Remote Direct Memory Access * Designed a virtual network abstraction, enabling the physical network to support more tenants and provide bandwidth guarantees * Developed an efficient enforcement scheme that can realize the abstraction in physical networks by using a limited number of hardware queues * Implemented the central controller of PARFAIT, which controls the running system by interacting with agent parts   **06/2018-10/2018 Institute of Automation, Chinese Academy of Sciences**  PYSCⅡ RL project — Reinforcement Learning Environment of Star Craft Ⅱ   * Abstract: Built the StarCraft Ⅱ Learning Environment and applied reinforcement learning algorithms to train multi-agents * Built the PYSCⅡ to train Star Craft soldiers with Advantage-Actor-Critic algorithm * Applied Multi-Agent Deep Deterministic Policy Gradient algorithm to further optimize multi-agents’ strategies * **Language:** proficient in Python, C++ and Latex; familiar with MATLAB and Java; basic in Solidity, JavaScript and C * **Professional:** Blockchain and Decentralized System; Smart Contract Design and Solidity Programming in Ethereum; Game Theory and Selfish Market Participants’ Behavior Formulation; Object Detection and Dynamic Target Tracking; Artificial Neural Network and Deep Learning * **09/2017-06/2018** Psychology Commissary, School of Data and Computer Science (SDCS), SYSU * **03/2017-06/2017** Group Leader of Guangdong Science Center Volunteer * **10/2016-06/2018** Debater of the Debate Team, SDCS, SYSU * **10/2016-06/2017** Officer of the New Media Operation in the Working Committee, SYSU * **10/2016-06/2017** Member of Table Tennis Team, SDCS, SYSU * **10/2016-06/2018** Vice President of the Table Tennis Association of the east campus, SYSU * **09/2016**  Host of the Welcome Party of SDCS Student Union, SYSU * **2018-2019** Academic Innovation Scholarship, SYSU (Top 3%) * **2018-2019** Second Prize Scholarship, SYSU (Top 15%) * **2017** Excellent Student Leader, SDCS, SYSU * **2017** Silver Medal in the Intercollegiate Table Tennis Competition, SYSU * **2016** Bronze Medal in the Intercollegiate Table Tennis Competition, SYSU |
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