

**Yuanwen Tian**  
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## Current Position

**Center for Vision, Cognition, Learning and Autonomy (VCLA), UCLA**  
*Undergraduate Research Assistant*

*Jul 2018 – Jul 2019*

## Education

**Huazhong University of Science and Technology (HUST)**  
B.E., Electrical Engineering and Automation  
Overall Score: **92.8/100** Class Rank: **1/28** School Rank: **5/354**

*Expected: Jun 2019*

**University of California, Los Angeles (UCLA)**  
UCLA-CSST Research Program  
Overall Score: **A+**

*Jul 2018 – Sept 2018*

## Tests

- GRE General Test **331** (V 161 Q 170 AW 4)
- TOFEL iBT **106** (R 30 L 28 S 22 W 26)

*Jul 2017*

*Oct 2018*

## Publications (Journal Papers)

Y. Miao, **Yuanwen Tian**, L. Peng, M. S. Hossain, G. Mohammad, "Research and Implementation of ECGbased Biological Recognition Parallelization", *IEEE Access*, vol. 6, pp. 4759–4766, 2017. [DOI: 10.1109/ACCESS.2017.2771220](https://doi.org/10.1109/ACCESS.2017.2771220).

M. Chen, **Yuanwen Tian**, G. Fortino, J. Zhang, I. Humar, "Cognitive Internet of Vehicles", *Computer Communications*, vol. 120, pp. 58-70, 2018. [DOI: 10.1016/j.comcom.2018.02.006](https://doi.org/10.1016/j.comcom.2018.02.006).

Y. Miao, **Yuanwen Tian**, J. Cheng, M. S. Hossain, A. Ghoneim, "RADB: Random Access with Differentiated Barring for Latency Constrained Applications in NBIoT Network", *Wireless Communications and Mobile Computing*, 2018. [DOI: 10.1155/2018/6210408](https://doi.org/10.1155/2018/6210408).

**Yuanwen Tian**, J. Yang, J. Lu, C. Han, Z. Wei, "Cognitive Vehicular Ad Hoc Networks", *IEEE MMTC Communications Frontiers*, vol. 12, no. 2, pp. 37-40, March 2018.

Y. Qian, **Yuanwen Tian**, et al., "Towards Decentralized IoT Security Enhancement: A Blockchain Approach", *Computers and Electrical Engineering*, vol. 72, pp. 266-273, 2018. [DOI: 10.1016/j.compeleceng.2018.08.021](https://doi.org/10.1016/j.compeleceng.2018.08.021).

## Publications (Conference Papers)

W. Li, J. Lu, Y. Xu, Z. Wei, **Yuanwen Tian**, Y. Miao, "Wireless Cooperative Caching in Device to Device Networks: Simulation and Modeling", *12th EAI International Conference on Testbeds and Research Infrastructures for the Development of Networks & Communities (TRIDENTCOM 2017)*, 2017. (**Best Student Paper Award**) [DOI: 10.4108/eai.2892017.2273362](https://doi.org/10.4108/eai.2892017.2273362).

J. Yang, Y. Miao, C. Han, **Yuanwen Tian**, X. You, Y. Jiang, "OPPOCO: From Ad Hoc Cloudlet-assisted Edge Computation to Opportunistic Computation Offloading", *12th EAI International Conference on Testbeds and Research Infrastructures for the Development of Networks & Communities (TRIDENTCOM 2017)*, 2017. [DOI: 10.4108/eai.2892017.2273365](https://doi.org/10.4108/eai.2892017.2273365).

## Research Experience

**Center for Vision, Cognition, Learning and Autonomy (VCLA), UCLA** *Jul 2018 – present*  
*Research Assistant*

Advisor: Professor Tao Gao

Project 1: Model-Based trajectory planning through generic nonlinear programming

- Participated in building trajectory optimization library using CMake and C++
- Implemented robotic motion planning with constraints using MuJoCo (Multi-Joint dynamics with Contact) physics engine and IPOPT (Interior Point OPTimizer) solver
- Evaluated our trajectory library on two task scenarios (random-target and collision-free) and three models (inverted pendulum, inverted double pendulum and cart pole)

**Embedded and Pervasive Computing Lab (EPIC), HUST** *Nov 2016 – present*  
*Research Assistant*

Advisor: Professor Min Chen

Project 1: Emotion communication and affective computing

- Implemented experiments on ECG based biological recognition parallelization
- Participated in designing AIWAC Robot (Affective Interaction through Wide-Learning And Cognitive Computing) based on emotion communication

Project 2: Data driven computing and caching in 5G networks

- Study on computation offloading and caching optimization
- Evaluated edge cognitive computing platform for Internet of Things applications

## Awards and Scholarship

International-level

- Best Student Paper Award for TRIDENTCOM 2017 *Sept 2017*

National-level

- China National Scholarship, awarded by Ministry of Education of China & Ministry of Finance of China (The highest level of academic scholarship in my country) *Oct 2016*

University-level

- Technology Innovation Award, Huazhong University of Science and Technology *Sept 2018*
- Academic Excellent Scholarship, Huazhong University of Science and Technology *Sept 2018*
- UCLA-CSST Scholarship, University of California, Los Angeles *Jul 2018*
- Si Yuan EE Scholarship, Huazhong University of Science and Technology *Apr 2018*
- Merit-Student Scholarship, Huazhong University of Science and Technology *Oct 2017*
- Outstanding Undergraduates (top 1%), Huazhong University of Science and Technology *Dec 2016*
- Merit-Student Scholarship, Huazhong University of Science and Technology *Oct 2016*
- Si Yuan EE Scholarship, Huazhong University of Science and Technology *Apr 2016*