DING YAN

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EDUCATION

State University of New York at Binghamton, USA *Sep 2019 - Present*
PhD, Department of Computer Science, Majoring in Coputer Science and Technology
Supervised by Assistant Prof. Shiqi Zhang
GPA: 4.0/4.0 (latest)

Chongqing University, China *Sep 2016 - Jun 2019*
Master, College of Computer Science, Majoring in Coputer Science and Technology
Supervised by Full Prof. Chao Chen
GPA: 3.03/4.0

Chongqing University, China *Sep 2012 - Jun 2016*
Bachelor, College of Mechanical Engineering, Majoring in Mechatronic Engineering
GPA: 3.23/4.0, Rank: 9/125

CARRIER OBJECTIVE

Artificial Intelligence, Autonomous Intelligent Robotics, Urban Driving, and Urban Computing.

PUBLICATIONS (SORTED BY YEAR)

Conference Article

- [1] **Yan Ding**, et al. *ask-Motion Planning for Safe and Efficient Urban Driving.* arXiv preprint arXiv:2003.03807, 2020.
- [2] **Yan Ding**, Chao Chen, et al. *GreenPlanner: Planning personalized fuel-efficient driving routes using multi-sourced urban data.* **IEEE International Conference on Pervasive Computing and Communications (PerCom)**, Pages 207-216, Hawaii, USA, March 13-17, 2017. (Accepted Rate:14.8%)
- [3] **Yan Ding**, Chao Chen, et al. *Fuel Consumption Estimation of Potential Driving Paths by Leveraging Online Route APIs*, **The 13th International Conference on Green, Pervasive and Cloud Computing (GPC)**, Pages X-Y, Hangzhou, China, April 11-14, 2018. (EI-index)
- [4] **Yan Ding**, Chao Chen, et al. *An Online Trajectory Compression System Applied to Resource-Constrained GPS Devices in Vehicles*, **IEEE International Conference on Sensing, Communication and Networking (SECON Workshops)**, Pages X-Y, HongKong, China, June 11-13, 2018. (CCF-B)

Journal Article (#equal contribution)

- [1] Chao Chen#, **Yan Ding#**, et al. *A Novel Online Trajectory Compression Framework Leveraging Vehicle Heading Direction and Change.* In: **IEEE Transactions on Intelligent Transportation Systems, 2018.** (IF 4.07)
- [2] Chao Chen#, **Yan Ding#**, et al. *A Three-stage Online Map-Matching Algorithm by Fully Using Vehicle Heading Direction.* In: **Journal of Ambient Intelligence and Humanized Computing, 2018**. (IF 1.588)
- [3] **Yan Ding**, et al. *Eco-Route: Recommending Economical Driving Routes For Plug-in Hybrid Electric Vehicles.* (arXiv)

- [4] Yuanjian Zhang, Chu Liang, **Yan Ding**, et al. *A Hierarchical Energy Management Strategy Based on Model Predictive Control for Plug-in Hybrid Electric Vehicle.* In: **IEEE Access, 2019.** (IF 4.098)
- [5] Yuanjian Zhang, Chu Liang, **Yan Ding**, et al. *A Hierarchical Energy Management Strategy Based on Model Predictive Control for Plug-in Hybrid Electric Vehicle.* In: **IEEE Access, 2019.** (IF 4.098)
- [6] Chao Chen#, **Yan Ding#**, et al. *DAVT: An Error-bounded Trajectory Data Representation and Compression Framework.* In: **IEEE Transactions on Intelligent Transportation Systems, 2019.** (Minor Revision, IF 4.07)
- [7] Kong Ye, Penglin Dai, Xiao Wu, **Yan Ding#**, et al. *Bandwidth-Aware Traffic Sensing in Vehicular Networks with Mobile Edge Computing.* In: **Sensors, 2019** (IF 3.031)

ACTIVITIES EXPERIENCE

- On June 11-13, 2018, oral instruction (45 minutes) in HongKong, China.
- On April 11-14, 2018, oral presentation (25 minutes) in Hangzhou, China
- On March 13-17, 2017, oral presentation (25 minutes) in Hawaii, USA.

AWARDS & HONORS

- **Academic Star at College of Computer Science Chongqing University**
  one student per year & the highest academic honor for master students, 2018)
- **Academic Star in BDSC group, College of Computer Science Chongqing University**
  (one person per year & the highest academic honor for lab members, 2018)
  (one person per year at the College of Computer Science, 2018)
- Second-Class Scholarship of Chonging University (top 10%, 2013)
- Third-Class Scholarship of Chonging University (top 15%, 2014)
- National Training Programs of Innovation for Undergraduate (2014)
- Student Research Training Program (2014)
- Third-Class Scholarship of Chonging University (top 15%, 2015)
- Mathematical Contest In Modeling (Honorable Mention, 2016)

PATENTS

- Chao Chen, **Yan Ding** and Xuefeng Xie, CN 108253976 A (2018). *The patent is based on the paper* [5].
- Chao Chen, **Yan Ding**, Liang Feng, Yun Lin and Yandong He, CN 107014389 A (2017) . *The patent is based on the paper* [1].
- Yuan Wang, Yun Kong, Rui Yan and **Yan Ding**, CN 203936094 U (2014). The patent is to design a bottle washer.

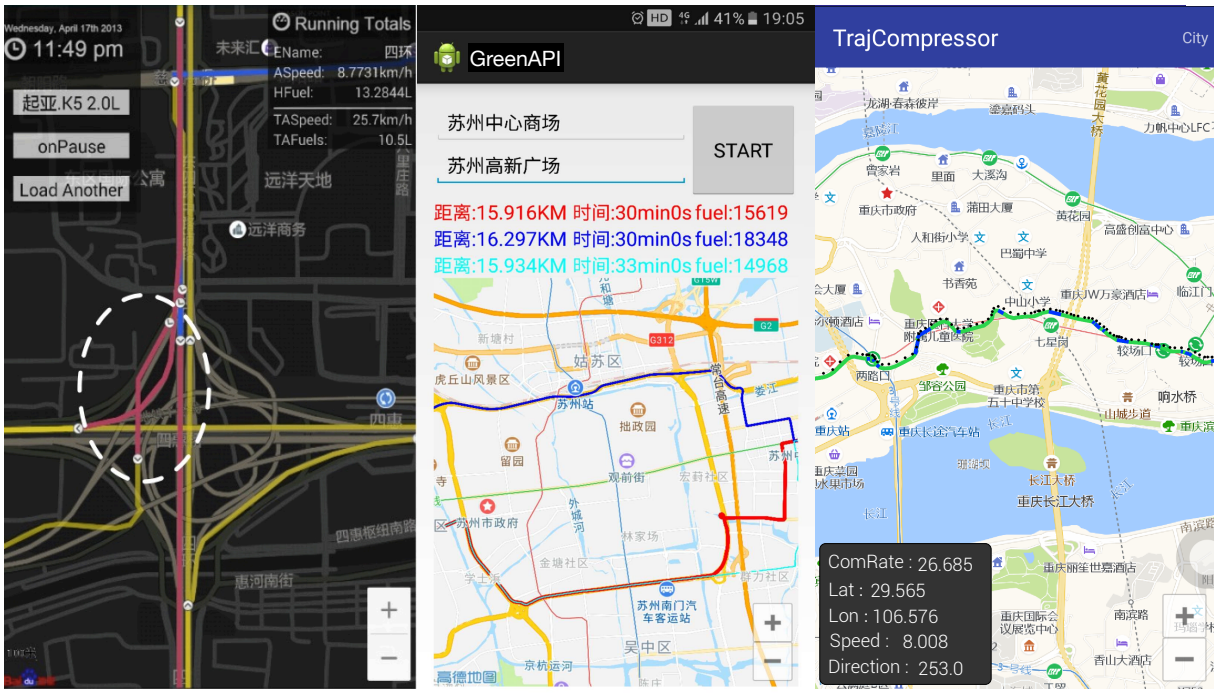
APPLICATION DEMOS

FuelVisualizer is to *display the real-time fuel-consumption of vehicles* on paths in the city of Beijing, China. Fuel consumption is classified into three types i.e.,high, medium and low in terms of the fuel consumption per hundred kilometers. Types are represented by three colors, and more specifically blue,

yellow and red refer to low, medium and high fuel usage, respectively. This demo is based on the paper [1]. Project Period: Sep 2015 - Jun 2016

GreenAPI is to *recommend the most fuel-efficient driving route* for users among all routes from the beginning to the destination provided by online route APIs (e.g., Gaode Map). The demo is based on the two papers [1, 2]. Project Period: Dec 2017 - Jun 2018

TrajCompressor is to *online compress the raw GPS trajectory data* to reduce the storage and communication cost. The demo is based on the three papers [4, 5, 6] Project Period: Sep 2017 - May 2018



FuelVisualizer **GreenAPI** **TrajCompressor**

SKILLS

Programming Skills: Python (Skillful), Answer Set Programming (Skillful), MATLAB (Skillful), Java (Basic), LaTeX (Skillful), Julia (Basic), Mathematica (Basic) and C/C++ (Basic)

Language Skills: Mandarin (Mother tongue) and English (Proficient)