

Masters Coursework Thesis

List of students undertaking Masters Coursework Thesis

| Year | Title | Author | Supervisor | Co- supervisor |
|------|--|----------------|-------------------------|-------------------|
| 2023 | The application of Hyperledger Fabric blockchain in international maritime logistics | Ni, Lifeng | Irannezhad, Elnaz | |
| 2022 | Mapping Sydney's Footpath Network with Street-level 360 Degree Imagery Data | Zhou, Zhuoyang | Saberi Kalaee, Meead | |
| 2022 | Computer Vision- Based Collision Avoidance for Driverless Cars | Yan, Shuo | Lim, Samsung | |
| 2022 | High-Definition Mapping For Automatic Driving: Point Cloud Fitting | Wu, Haotian | Wang,J, Jinling | |
| 2022 | Analysis of footpath network using image semantic segmentation method | Yang, Yi | Saberi Kalaee, Meead | |
| 2022 | Visual Sensing and Deep Learning for Autonomous Driving | Liu, Ming | Wang,J, Jinling | |

| Computer Vision- Based Vehicle Recognition Technology | Yang, Shuyu | Lim, Samsung | |
|---|--|---|---|
| Modelling and Managing Traffic Externalities in a Large-scale Network | Zhou, Xinyi | Liu, Wei | |
| Understanding the route choice behaviour of pedestrians | Zhou, Zinan | Saberi Kalaee, Meead | |
| Quantifying the impacts of railway/transit services with a data-driven approach | Xie, Fangzheng | Liu, Wei | |
| Heurisitics for Dynamic Packing and Routing Problem | Tobing, Irvin Nathaniel | Rey, David | Nair, Divya |
| Understanding the route choice behaviour of pedestrians | Jakhar, Tejender | Saberi Kalaee, Meead | |
| Understanding the route choice of pedestrains | Hou, Runtong | Saberi Kalaee, Meead | |
| Computer Vision- Based Traffic Flow Monitoring | Sui, Yudian | Lim, Samsung | |
| Multi-agent Reinforcement Learning-based Impact of Automated Vehicles on Traffic | Zhang, Chengwei | Saberi Kalaee, Meead | |
| | Based Vehicle Recognition Technology Modelling and Managing Traffic Externalities in a Large-scale Network Understanding the route choice behaviour of pedestrians Quantifying the impacts of railway/transit services with a data-driven approach Heurisitics for Dynamic Packing and Routing Problem Understanding the route choice behaviour of pedestrians Understanding the route choice of pedestrians Computer Vision- Based Traffic Flow Monitoring Multi-agent Reinforcement Learning-based Impact of Automated | Based Vehicle Recognition Technology Modelling and Managing Traffic Externalities in a Large-scale Network Understanding the route choice behaviour of pedestrians Quantifying the impacts of railway/transit services with a data-driven approach Heurisitics for Dynamic Packing and Routing Problem Understanding the route choice behaviour of pedestrians Understanding the route choice of pedestrians Understanding the route choice of pedestrians Computer Vision- Based Traffic Flow Monitoring Multi-agent Reinforcement Learning-based Impact of Automated Zhou, Zinan Zhou, Zinan Tobing, Irvin Nathaniel Hou, Runtong Bakhar, Tejender Hou, Runtong Sui, Yudian Sui, Yudian Zhang, Chengwei | Based Vehicle Recognition Technology Modelling and Managing Traffic Externalities in a Large-scale Network Understanding the route choice behaviour of pedestrians Quantifying the impacts of railway/transit services with a data-driven approach Heurisitics for Dynamic Packing and Routing Problem Understanding the route choice behaviour of pedestrians Understanding the route choice behaviour of pedestrians Understanding the route choice behaviour of pedestrians Understanding the route choice of pedestrians Computer Vision- Based Traffic Flow Monitoring Multi-agent Reinforcement Learning-based Impact of Automated Zhang, Chengwei Liu, Wei Saberi Kalaee, Meead Saberi Kalaee, Meead Chengwei Chengwei Liu, Wei |



| | Flow Characteristics | | |
|------|--|-----------------------------------|-------------------------------|
| 2021 | Computer Vision- Based Traffic Flow Monitoring | Wang, Yufan | Lim, Samsung |
| 2021 | Transport modelling: analysis on bike-sharing service | Wang, Guoliang | Zhang, Xiang |
| 2020 | Quantifying Network Structure using Fractal Dimension | Njoteah, Christopher Nnanke | Chakka, Mohana Naga Sai |
| 2020 | Factors influencing travel preferences of people under the influence of the COVID-19 | Cai, Yue | Ardeshiri, Ali |
| 2020 | Factors that influence facility location of UAV infrastructure | Pratthigadapa, Prasanth | Rey, David |
| 2020 | The Impacts of Ridesharing: A Case Study of Sydney's M4 Motorway | Song, Changle | Rey, David |
| 2020 | Understanding the destination choice of pedestrians | Lian, Pengyu | Saberi Kalaee, Meead |
| 2020 | Quantifying the economic impacts of railway/transit services with a data-driven approach | Wang, Jie | Liu, Wei |
| 2020 | Impact of Autonomous | Mannan, Areena | Saberi Kalaee, Meead |



Vehicles on Urban Traffic

| 2020 | Modeling and Simulating a Mixed Network with Autonomous Vehicles and Conventional Vehicles | Sun, Luchen | Liu, Wei | |
|------|---|----------------------------------|-------------------------|-------------------|
| 2020 | A stated Preference Study on Investigating Mode Choice for Sydney CBD Commuters Using Biogeme | Chen, Xiaofeng | Najmi, Ali | |
| 2020 | Transport in remote Australia - analysis and prospects | Rottemberg, Maria Julieta | Grzybowska, Hanna | Waller, Travis |
| 2020 | Intelligence From Smart Streetlights | Wang, Yang | Ge, Linlin | |
| 2020 | The Changes in Traffic Flow Characteristics in Highway Merging due to the advent of Reinforcement Learned Autonomous Vehicles | Tang, Ming | Saberi Kalaee, Meead | |
| 2020 | Modelling network traffic with Autonomous Vehicles | Gopalakrishnan, Radhika | Liu, Wei | |
| 2020 | Quantifying the Complexity and Connectivity of China High-speed Rail Development and Its Implication | Nanlohy, Vinensia Meisclin | Liu, Wei | |



| | on The Economic Growth | | | |
|------|--|---------------------------------------|-------------------------------|----------------------|
| 2020 | Modelling and Evaluating Traffic Signal Priority for Light Rail | Zheng, Xuhan | Gu, Ziyuan Frank | |
| 2020 | Route Choice Behaviour: a comparison between university and online sample | Wan, Lei | Ardeshiri, Ali | |
| 2020 | Modeling and Managing Traffic Externalities in a Large-scale Network | Chen, Xiaoxiao | Liu, Wei | |
| 2020 | Assessment of Short-Term and Long-Term Impacts of Disruptive Transportation Technologies on Large-Scale Networks | Anderson Saldana, Kevin Michael | Waller, Travis | Grzybowska, Hanna |
| 2020 | Modelling relationships between traffic flow fluctuations and crashes | Li, Pengfei | Chakka, Mohana Naga Sai | |
| 2020 | Designing Traffic Signals to Accommodate Sydney Light Rail | Liu, Yifan | Gu, Ziyuan Frank | |
| 2020 | Understanding the route choice behavior of pedestrians | Xiao, Tianpei | Saberi Kalaee, Meead | |



| 2020 | Traffic flow characteristics of automated vehicles | Yu, Gongda | Saberi Kalaee, Meead | |
|------|---|--------------------|-------------------------|--------------------------------|
| 2020 | Housing acquisition and investment study: residents attitudes, behaviours and preferences | Gao, Kai | Ardeshiri, Ali | |
| 2019 | Quantifying the relationships between air quality and transport and urban development | Zhang, Xu | Liu, Wei | |
| 2019 | Modelling and simulation of the stochastic aircraft boarding process | Huang, Rong | Liu, Wei | Zhang, Fangni (External) |
| 2019 | Analysing the impact of autonomous vehicles on the network traffic flow | Zhang, Weihao | Gu, Ziyuan | |
| 2019 | Mapping Urban Noise in Sydney | Zheng, Xiaofeng | Saberi Kalaee, Meead | |
| 2019 | Traffic flow theory and characteristics of automated vehicles | Li, Mupeng | Saberi Kalaee, Meead | Gu, Ziyuan |
| 2019 | Mapping Urban Noise in Sydney | Feng, Li | Saberi Kalaee, Meead | |
| 2019 | Mapping Urban Noise Data in Sydney | Chen, Tianzhou | Saberi Kalaee, Meead | |



| 2019 | Studying passengers reaction to train disruptions due to trackwork maintenance in Sydney | Cui, Yanhao | Saxena, Neeraj | |
|------|--|---------------|--------------------------|------------|
| 2019 | Mapping urban noise in Sydney | Wang, Yanjing | Saberi Kalaee, Meead | |
| 2019 | Traffic flow characteristics of automated vehicles | Li, Xin | Saberi Kalaee, Meead | |
| 2019 | Understanding the destination choice behaviour of pedestrians | Zhao, Yiyun | Saberi Kalaee, Meead | |
| 2019 | Computer Vision- based Collision Avoidance for Driverless Car | Luan, Mingye | Lim, Samsung | |
| 2019 | Traffic flow theory and characteristics of automated vehicles | Chang, Xiaoli | Saberi Kalaee, Meead | Gu, Ziyuan |
| 2019 | Traffic flow theory and characteristics of automated vehicles | Dai, Qingwen | Saberi Kalaee, Meead | Gu, Ziyuan |
| 2019 | Traffic flow characteristics of automated vehicles | Ligawan, Kane | Saberi Kalaee, Meead | |
| 2019 | Urban Transport Expenditures & Life Satisfaction | Qing, Taiyu | Ghasrikhouzani, Milad | |
| 2019 | Mapping urban noise in Sydney | Xi, Kangyu | Saberi Kalaee, Meead | |



| 2019 | Mapping urban noise in Sydney | Chen, Chuan | Saberi Kalaee, Meead | |
|------|--|--------------|----------------------------|-------------------|
| 2019 | Optimising human performance of the Dynamic Driving Task fallback through the use of auditory and visual alert tones | Zhao, Yiming | Prabhakharan, Prasannah | Dixit, Vinayak |
| 2019 | Autonomous vehicles: Disengagements and accidents | Chen, Huang | Chakka,Mohana Naga Sai | |
| 2019 | transport resilience to natural disaster- Tropical Cyclone Debbie | Du, Qiang | Dixit,Vinayak | |
| 2019 | Using crowdsourced traffic data for predicting crashes | Liu, Tianyu | Chakka,Mohana Naga Sai | |
| 2019 | Understanding the route choice behaviour of pedestrians | Zhi, Feng | Saberi Kalaee,Meead | |
| 2019 | Have people started walking more in Sydney? Role of Fitness tracker in encouraging walk behavior | Mi, Jiarui | Saxena,Neeraj | |
| 2019 | Analysis of Air Travel In Australia from 2004 to 2018 | Li, Qiang | Chakka,Mohana Naga Sai | |
| 2019 | The effect of different factors on traffic incidents duration | Zhang, Xinan | Chakka,Mohana Naga Sai | |



| 2019 Quantifying the economic impacts of High-speed Railway Development 2019 Transportation Network Resilience on 2016 Waroona Fire 2018 Optimal traffic intersection control for autonomous vehicles and pedestrians 2018 A Customer Satisfaction Survey of On-demand transport Services: Case Study of Northern Beaches and Macquarie Park in Sydney 2018 Microsimulation-based Study on Interaction Between Pedestrians and Connected and Autonomous Vehicles 2018 The application of entropy in travel speed data analysis on motorway 2018 Preferences for ride-pooling in ridesharing systems Yang, Zhiwei Liu,Wei Dixit,Vinayak Rey, David Andres Leonardo Saxena, Neeraj Grzybowska, Hanna Grzybowska, Hanna Parybowska, Hanna Carsybowska, Hanna Dixit, Vinayak Chakka, Mohana Naga Sai Chakka, Mohana Naga Sai | | | | | |
|---|------|--|------------------|----------------|--------|
| Network Resilience on 2016 Waroona Fire 2018 Optimal traffic intersection control for autonomous vehicles and pedestrians 2018 A Customer Satisfaction Survey of On-demand transport Services: Case Study of Northern Beaches and Macquarie Park in Sydney 2018 Microsimulation-based Study on Interaction Between Pedestrians and Connected and Autonomous Vehicles 2018 The application of entropy in travel speed data analysis on motorway 2018 Preferences for ride-pooling in ridesharing | 2019 | economic impacts of High-speed Railway | Yang, Zhiwei | Liu,Wei | |
| intersection control for autonomous vehicles and pedestrians 2018 A Customer Satisfaction Survey of On-demand transport Services: Case Study of Northern Beaches and Macquarie Park in Sydney 2018 Microsimulation-based Study on Interaction Between Pedestrians and Connected and Autonomous Vehicles 2018 The application of entropy in travel speed data analysis on motorway 2018 Preferences for ride-pooling in ridesharing | 2019 | Network Resilience on 2016 Waroona | Yin, Yongjian | Dixit,Vinayak | |
| Satisfaction Survey of On-demand transport Services: Case Study of Northern Beaches and Macquarie Park in Sydney 2018 Microsimulation-based Study on Interaction Between Pedestrians and Connected and Autonomous Vehicles 2018 The application of entropy in travel speed data analysis on motorway 2018 Preferences for ride-pooling in ridesharing Satisfaction Survey of On-demand and Services: Case Study of Northern Beaches and Mario Jr. Grzybowska, Hanna Dizon, Mario Jr. Grzybowska, Hanna Corzybowska, Hanna Dixit, Vinayak Chakka, Mohana Naga Sai | 2018 | intersection control for autonomous vehicles and | Andres | Rey, David | |
| based Study on Interaction Between Pedestrians and Connected and Autonomous Vehicles 2018 The application of entropy in travel speed data analysis on motorway 2018 Preferences for ride-pooling in ridesharing Hanna Hanna Hanna Chakka, Mohana Naga Sai Saxena, Neeraj | 2018 | Satisfaction Survey of On-demand transport Services: Case Study of Northern Beaches and Macquarie | Sun, Teng | Saxena, Neeraj | |
| entropy in travel speed data analysis on motorway 2018 Preferences for Lyu ,Bocan Jian, Sisi Saxena, Neeraj ride-pooling in ridesharing | 2018 | based Study on Interaction Between Pedestrians and Connected and Autonomous | Dizon, Mario Jr. | • | |
| ride-pooling in Neeraj nidesharing | 2018 | entropy in travel speed data analysis on | Zhao, Tianyi | Dixit, Vinayak | Mohana |
| | 2018 | ride-pooling in ridesharing | Lyu ,Bocan | Jian, Sisi | • |



| 2018 | Exploring the Possibility of Predicting the Ridership Based on Crowdsourced Cycling Data | Quan, Yingzhou | Roberts, Craig |
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| 2018 | Crowd Sourced Data For Traffic Incident Analysis:Multilinear Prediction Model for Recovery Time | Joseph, Remil | Divya, Jayakumar Nair |
| 2018 | Navigation and control system for autonomous vehicle platooning | Xu, Yibai | Wang,J, Jinling |
| 2018 | Pedestrian-vehicle collision avoidance for autonomous cars in future intelligent transport systems | Ma, Kexu | Wang,J, Jinling |
| 2018 | Genetic Algorithm for Route Planning in Automatic Driving | Suo, Linyuan | Wang,J, Jinling |
| 2018 | Evaluation of the impact of accessibility on travelers' mode choice for public transit | Zheng, Yifei | Jian, Sisi |
| 2017 | Market Uptake of a New Mobility Option in Sydney Metropolitan Area: A Stated Choice Study on Motorcycle Taxis | Peng, Bozhezi | Hossein Rashidi, Taha |
| 2016 | The Impact of Automotive Night | Hu, Shihui | Rizos, Chris |



| | Vision Systems on Driver Behaviour and Driving Performance | | |
|------|--|----------------------------|--------------------------|
| 2015 | High Performance Positioning Framework for C- ITS | Zuo, Chen | Rizos, Chris |
| 2015 | Establishing a destination choice model of the Melbourne city | Wan, Pinzhang | Hossein Rashidi, Taha |
| 2015 | Transportation- land use connection in Sydney census data | Zheng, Yi | Moylan, Emily |
| 2015 | Predicting Casualty-Accident Count by HIghway Design Standards Compliance, Study Case: East Java North Corridor Network - Indonesia | Rizaldi, Arief | Dixit, Vinayak |
| 2015 | Zero-inflated Negative Binomial Regression Model: Accident Frequency Estimation at North Coast Corridor Road (Central- Java Indonesia) | Junirman, Rizky Adelwin | Dixit, Vinayak |

