



ADMITERE DOCTORAT
Sesiunea Septembrie 2022

Domeniul de doctorat: Tehnologia Informaţiei
Conducător de doctorat: Claudiu Pozna

TEME (TEMATICĂ) PENTRU CONCURS

TEMA 1: - *Contribuţii la realizarea locomoţiei autonome a autovehiculelor rutiere: arhitectura programului de conducere inteligent;*

Conceperea unei arhitecturi de conducere care permite realizarea unui agent inteligent, capabil de a soluţiona problemele care apar în timpul conducerii unui autovehicul

Bibliografie recomandată:

1. Ackerman, J., Robust control for automatic steering, Proc. Amer. Conf., San Diego, CA, 1990, pp.795-800;
2. Al-Shihabi, T., Mourant, R., A Framework for Modeling Human-like Driving Behaviors for Autonomous Vehicle in Driving Simulators. Proceedings 5th International Conference on Autonomous Agents, June 2001, 286-291;
3. Antsalkis, P., An introduction to Intelligent and Autonomous Control, Kluwer Academic Publisher Norwell 1993;
4. Bengtsson, J. Adaptive Cruise Control and Driver Modeling. Department of Automatic Control Lund Institute of Technology Lund, November 2001;
5. Huang, S., Design and Performance Evaluation of Mixed Manual and Automated Control Traffic. IEEE Transaction on Systems Man and Cybernetics Nov. 2000;
6. Kosko, B., Neural Network and Fuzzy Systems, Prentice Hall 1992;
7. Liu, A., Modeling and Prediction of Human Driver Behavior. Proc. of the 9th International Conference on Human Computer Interaction, Aug, 2001;
8. Michael E. McGrath Autonomous Vehicles: Opportunities, Strategies and Disruptions: Updated and Expanded Second Edition 2019;
9. Mizukami, R., Development of Autonomous Ground Vehicle Design of Control System. www.ee.ualberta.ca;
10. Michael Montemerlo, Sebastian Thrun Fast SLAM: A Scalable Method for the Simultaneous Localization and Mapping Problem in Robotic, Springer Science & Business Media, 2007;
11. Pozna C. Autovehiculul Autonom studi de caz, Ed. Universităţii Transilvania din Braşov 2006;
12. Pozna C. Modelarea roboţilor mobili MatrixRom 2020
13. Siciliano, B., Khatib, O., Springer Handbook of Robotics. Springer 2008;

14. Quispel, L., Automan, a psychologically based model of human driver. Experimental and Work Psychology. Department of Psychology, University of Groningen Grote Kruisstraat 2/1, 9751 MN Groningen;
15. Thrun, S. Probabilistic Robotics MIT Press, 2005;

Note /Precondiții / Obs.: se va adapta /completa/elimina, după caz

TEMA 2: - *Contribuții la realizarea locomoției autonome a autovehiculelor rutiere: implementarea unei infrastructuri inteligente*

Conceperea unei infrastructuri utilizabile în scopul autonomiei autovehiculelor

Bibliografie recomandată:

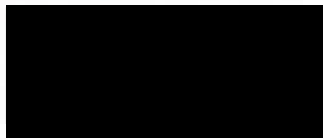
1. Ackerman, J., Robust control for automatic steering, Proc. Amer. Conf., San Diego, CA, 1990, pp.795-800;
2. Al-Shihabi, T., Mourant, R., A Framework for Modeling Human-like Driving Behaviors for Autonomous Vehicle in Driving Simulators. Proceedings 5th International Conference on Autonomous Agents, June 2001, 286-291;
3. Antsalkis, P., An introduction to Intelligent and Autonomous Control, Kluwer Academic Publisher Norwell 1993;
4. Bengtsson, J. Adaptive Cruise Control and Driver Modeling. Department of Automatic Control Lund Institute of Technology Lund, November 2001;
5. Huang, S., Design and Performance Evaluation of Mixed Manual and Automated Control Traffic. IEEE Transaction on Systems Man and Cybernetics Nov. 2000;
6. Kosko, B., Neural Network and Fuzzy Systems, Prentice Hall 1992;
7. Liu, A., Modeling and Prediction of Human Driver Behavior. Proc. of the 9th International Conference on Human Computer Interaction, Aug, 2001;
8. Michael E. McGrath Autonomous Vehicles: Opportunities, Strategies and Disruptions: Updated and Expanded Second Edition 2019;
9. Mizukami, R., Development of Autonomous Ground Vehicle Design of Control System. www.ee.ualberta.ca;
10. Michael Montemerlo, Sebastian Thrun Fast SLAM: A Scalable Method for the Simultaneous Localization and Mapping Problem in Robotic, Springer Science & Business Media, 2007;
11. Pozna C. Autovehiculul Autonom studi de caz, Ed. Universității Transilvania din Brașov 2006;
12. Pozna C. Modelarea roboților mobili MatrixRom 2020
13. Siciliano, B., Khatib, O., Springer Handbook of Robotics. Springer 2008;
14. Quispel, L., Automan, a psychologically based model of human driver. Experimental and Work Psychology. Department of Psychology, University of Groningen Grote Kruisstraat 2/1, 9751 MN Groningen;

15. Thrun, S. Probabilistic Robotics MIT Press, 2005;

Note /Precondiții / Obs.: se va adapta /completa/elimina, după caz

Conducător de doctorat,
de doctorat,

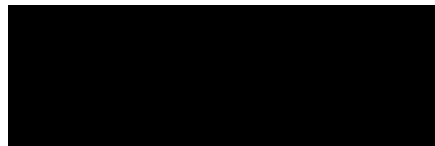
Prof. dr. Claudiu Pozna



Semnătură

Coordonatorul domeniului

Prof. dr. Sorin Moraru



Semnătură