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Publications

Refereed Journal Articles

J3 **Vishnu K. Narayanan**, François Pasteau, Maud Marchal, Alexandre Krupa and Marie Babel (2016). 'Vision-based adaptive assistance and haptic guidance for safe wheelchair corridor following'
Computer Vision and Image Understanding (**CVIU**), 149, pp. 171-185.

J2 François Pasteau, **Vishnu K. Narayanan**, Marie Babel and François Chaumette (2016). 'A visual servoing approach for autonomous corridor following and doorway passing in a wheelchair'
Robotics and Autonomous Systems (**RAS**), 75, pp. 28-40.

J1 Radhika N, Babu Devasenapathi , Subramanian R, Rahul Subramany and **Vishnu K. Narayanan** (2013). 'Pattern recognition based surface roughness prediction in turning Hybrid Metal Matrix Composite using Random Forest algorithm' *Industrial Lubrication and Tribology*, 65(1):5.

Refereed Conference Proceedings

C9 **Vishnu K. Narayanan**, Takahiro Miyashita, Yukiko Horikawa and Norihiro Hagita (2018). 'A Transient-Goal driven Communication-aware Navigation Strategy for Large Human-Populated Environments'
IEEE Intl. Conference on Intelligent Robots and Systems (**IROS**).

C8 Louise Devigne, François Pasteau, Marie Babel, **Vishnu K. Narayanan**, Sylvain Guegan, Philippe Gallien (2018). 'Design of a haptic guidance solution for assisted power wheelchair navigation'
IEEE Intl. Conference on Systems, Man and Cybernetics (**SMC**).

C7 **Vishnu K. Narayanan**, Takahiro Miyashita, and Norihiro Hagita (2018). 'Formalizing a Transient-Goal driven approach to Pedestrian-Aware Navigation'
IEEE Intl. Symposium on Robot and Human Interactive Communication (**RO-MAN**).

C6 Louise Devigne, Marie Babel, Florian Nouviale, **Vishnu K. Narayanan**, François Pasteau and Philippe Gallien (2017). 'Design of an immersive simulator for assisted power wheelchair driving'
IEEE/RAS-EMBS Intl. Conference on Rehabilitation Robotics (**ICORR**).

C5 **Vishnu K. Narayanan**, Anne Spanalzani and Marie Babel (2016). 'A semi-autonomous framework for human-aware and user intention driven wheelchair mobility assistance'
IEEE Intl. Conference on Intelligent Robots and Systems (**IROS**).

C4 Louise Devigne, **Vishnu K. Narayanan**, François Pasteau and Marie Babel (2016). 'Low complex shared-control for power wheelchair navigation'
IEEE Intl. Conference on Intelligent Robots and Systems (**IROS**).

C3 **Vishnu K. Narayanan**, Anne Spalanzani, Ren C. Luo and Marie Babel (2016). 'Analysis of an adaptive strategy for equitably approaching and joining human interactions'
IEEE Intl. Symposium on Robot and Human Interactive Communication (**RO-MAN**).

C2 **Vishnu K. Narayanan**, Anne Spalanzani, François Pasteau and Marie Babel (2015). 'On equitably approaching and joining a group of interacting humans'
IEEE Intl. Conference on Intelligent Robots and Systems (**IROS**).

C1 **Vishnu K. Narayanan** and Carl D. Crane III (2013). 'Active Relearning for Vision based Vehicle Detection and Tracking'
IEEE Intl. Conference on Control, Automation, and Systems (ICCAS).

Workshop Papers, Posters & Non-Refereed Conference Proceedings

W4 **Vishnu K. Narayanan**, Takahiro Miyashita and Norihiro Hagita (2018). 'On Transient-Goal Selection for Communication-Aware Robotic Navigation in Large Human-Populated Environments'
JSME Robotics and Mechatronics Conference (ROBOMECH).

W3 **Vishnu K. Narayanan**, François Pasteau, Marie Babel and François Chaumette (2014). 'Lyapunov-based visual servoing for autonomous doorway passing in a wheelchair'
IEEE IROS Workshop on Assistance and Service Robotics in a Human Environment.

W2 **Vishnu K. Narayanan**, Rahul Subramany, Babudevasenapati S and Radhika N. (2011). 'Studies on tree based classifiers for the prediction of surface roughness in turning Aluminium Metal Matrix Composites'
International Conference on Recent Advances in Mechanical Engineering.

W1 Rahul Subramany, **Vishnu K. Narayanan** and Babudevasenapati S. (2011). 'Condition Monitoring of an end mill cutter using Decision Tree algorithm'
International Conference on Recent Advances in Mechanical Engineering.

Thesis

T2 **Vishnu K. Narayanan** (2016). 'Characterizing assistive shared control through vision-based and human-aware designs for wheelchair mobility assistance'
Ph.D. Thesis, Institut National des Sciences Appliquées de Rennes.

T1 **Vishnu K. Narayanan** (2013). 'Vision based Robust Vehicle Detection and Tracking VIA Active Learning.'
M.Sc. Thesis, University of Florida.