

# Publications for David Rye

## 2016

Velonaki, M., Rye, D. (2016). Designing robots creatively. In Damith Herath, Christian Kroos, Stelarc (Eds.), *Cognitive Science and Technology*, (pp. 379-401). Singapore: Springer. <a href="http://dx.doi.org/10.1007/978-981-10-0321-9\_19">[More Information]</a>

Mikl, J., Rye, D. (2016). Twist within a somersault. *Human Movement Science*, 45, 23-39. <a href="http://dx.doi.org/10.1016/j.humov.2015.11.002">[More Information]</a>

## 2015

Silvera Tawil, D., Rye, D., Velonaki, M. (2015). Artificial skin and tactile sensing for socially interactive robots: A review. *Robotics and Autonomous Systems*, 63(3), 230-243. <a href="http://dx.doi.org/10.1016/j.robot.2014.09.008">[More Information]</a>

Maeda, G., Manchester, I., Rye, D. (2015). Combined ILC and Disturbance Observer for the Rejection of Near-Repetitive Disturbances, With Application to Excavation. *IEEE Transactions on Control Systems Technology*, 23(5), 1754-1769. <a href="http://dx.doi.org/10.1109/TCST.2014.2382579">[More Information]</a>

Silvera Tawil, D., Rye, D., Soleimani, M., Velonaki, M. (2015). Electrical impedance tomography for artificial sensitive robotic skin: A review. *IEEE Sensors Journal*, 15(4), 2001-2016. <a href="http://dx.doi.org/10.1109/JSEN.2014.2375346">[More Information]</a>

Ball, A., Rye, D., Silvera Tawil, D., Velonaki, M. (2015). Group Vs. individual comfort when a robot approaches. *7th International Conference on Social Robotics, ICSR2015*, Cham, Switzerland: Springer. <a href="http://dx.doi.org/10.1007/978-3-319-25554-5\_5">[More Information]</a>

Silvera Tawil, D., Velonaki, M., Rye, D. (2015). Human-robot Interaction with Humanoid Diamandini Using an Open Experimentation Method. *24th IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN2015)*, Piscataway: Institute of Electrical and Electronics Engineers (IEEE). <a href="http://dx.doi.org/10.1109/ROMAN.2015.7333674">[More Information]</a>

Ball, A., Rye, D., Silvera Tawil, D., Velonaki, M. (2015). Understanding group comfort through directional statistics. *7th International Conference on Social Robotics, ICSR2015*, Cham, Switzerland: Springer. <a href="http://dx.doi.org/10.1007/978-3-319-25554-5\_6">[More Information]</a>

## 2014

Ball, A., Silvera Tawil, D., Rye, D., Velonaki, M. (2014). Group Comfortability When a Robot Approaches. In Michael Beetz, Benjamin Johnston, Mary-Anne Williams (Eds.), *Social Robotics*, (pp. 44-53). Cham, Switzerland: Springer. <a href="http://dx.doi.org/10.1007/978-3-319-11973-1\_5">[More Information]</a>

Silvera Tawil, D., Rye, D., Velonaki, M. (2014). Interpretation of social touch on an artificial arm covered with an EIT-based sensitive skin. *International Journal of Social Robotics*, 6(4), 489-505. <a href="http://dx.doi.org/10.1007/s12369-013-0223-x">[More Information]</a>

</a>[More Information]</a>

Maeda, G., Rye, D., Singh, S. (2014). Iterative autonomous excavation. In Kazuya Yoshida, Satoshi Tadokoro (Eds.), *Field and Service Robotics: Results of the 8th International Conference*, (pp. 369-382). Berlin: Springer. <a href="http://dx.doi.org/10.1007/978-3-642-40686-7\_25">[More Information]</a>

## 2013

Velonaki, M., Rye, D. (2013). Art and Robotics - A Brief Account of Eleven Years of Cross-disciplinary Invention. In Andy Dong, John Conomos, Brad Buckley (Eds.), *Ecologies of Invention*, (pp. 55-68). Sydney, Australia: Sydney University Press.

## 2012

Silvera Tawil, D., Velonaki, M., Rye, D. (2012). EIT-based skin and touch interpretation for human-robot interaction. *Proceedings of the 2012 IEEE/RSJ International Conference on Intelligent Robots and Systems Workshops and Tutorials*. Institute of Electrical and Electronics Engineers (IEEE).

Silvera Tawil, D., Rye, D., Velonaki, M. (2012). Interpretation of the modality of touch on an artificial arm covered with an EIT-based sensitive skin. *International Journal of Robotics Research*, 31(13), 1627-1641. <a href="http://dx.doi.org/10.1177/0278364912455441">[More Information]</a>

Maeda, G., Rye, D. (2012). Learning disturbances in autonomous excavation. *2012 IEEE/RSJ International Conference on Intelligent Robots and Systems*, Piscataway, NJ: Institute of Electrical and Electronics Engineers (IEEE). <a href="http://dx.doi.org/10.1109/IROS.2012.6385566">[More Information]</a>

Ball, A., Rye, D., Ramos, F., Velonaki, M. (2012). Unsupervised clustering of people from 'Skeleton' data. *7th ACM/IEEE International Conference on Human-Robot Interaction*, New York, NY, USA: Association for Computing Machinery (ACM). <a href="http://dx.doi.org/10.1145/2157689.2157767">[More Information]</a>

## 2011

Ball, A., Rye, D., Ramos, F., Velonaki, M. (2011). A Comparison of Unsupervised Learning Algorithms for Gesture Clustering. *6th ACM/IEEE International Conference on Human-Robot Interaction (HRI 2011)*.

Silvera Tawil, D., Rye, D., Velonaki, M. (2011). Improved Image Reconstruction for an EIT-Based Sensitive Skin With Multiple Internal Electrodes. *IEEE Transactions on Robotics*, 27(3), 425-435. <a href="http://dx.doi.org/10.1109/TRO.2011.2125310">[More Information]</a>

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<http://dx.doi.org/10.1109/IROS.2011.6094437>>[More Information]</a>

Silvera Tawil, D., Rye, D., Velonaki, M. (2011). Touch Modality Interpretation for an EIT-Based Sensitive Skin. *IEEE International Conference on Robotics and Automation ICRA 2011*, USA: Institute of Electrical and Electronics Engineers (IEEE). <a href="http://dx.doi.org/10.1109/ICRA.2011.5979697">[More Information]</a>

## 2009

Velonaki, M., Rye, D., Scheduling, S. (2009). *Circle E: Fragile Balances*. In: Double Take: Anne Landa Award for Video and New Media Arts. Art Gallery of NSW. Art Gallery of New South Wales, Sydney, Melbourne and Hong Kong, Australia.

Silvera Tawil, D., Rye, D., Velonaki, M. (2009). Improved EIT drive patterns for a robotics sensitive skin. *2009 Australasian Conference on Robotics and Automation*, Sydney: Australian Robotics and Automation Association (ARAA).

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Velonaki, M., Scheduling, S., Rye, D., Durrant-Whyte, H. (2008). Shared Spaces: Media Art, Computing, and Robotics. *Computers in Entertainment*, 6(4), 51:1-51:12. <a href="http://dx.doi.org/10.1145/1461999.1462003">[More Information]</a>

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## 2004

Ha, Q., Rye, D. (2004). A Control Architecture For Robotic Excavation In Construction. *Computer-Aided Civil and Infrastructure Engineering*, 19(1), 28-41. <a href="http://dx.doi.org/10.1111/j.1467-8667.2004.00335.x">[More Information]</a>

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Vehicle: From Development To Implementation. *IEEE Conference on Control Applications International Symposium on Intelligent Control Computer Aided Control Systems Design*. Institute of Electrical and Electronics Engineers (IEEE).

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