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Personal summary

I am a driven and enthusiastic academic with 11 years post Ph.D experience in road safety and sleep research, **85 peer reviewed publications (53 journal, 33 conference), over £3.5mil of research income** (including over £1 mil as principle investigator), 3 book chapters and over 48 research reports

Research and Teaching Interests

Causes and contributors to sleepiness and fatigue, impact of fatigue and sleepiness on safety, mitigating and managing sleepiness/fatigue impairment, road transport safety, rail transport safety, occupational safety and fatigue, human factors, evidence-based policy making, driver impairment, driving simulators, mixed methods.

Education

- 2021: Level 2 Certificate in Awareness of Mental Health Problems, NCFE CACHE, UK
- 2019: Level 5 Diploma in Leadership and Management, The Institute of Leadership and Management, UK
- 2011: Ph.D (Driver Sleepiness), Loughborough University, UK
 Thesis: Obstructive Sleep Apnoea and Day time Driver Sleepiness. Supervisor: Dr Louise Reyner, Director of Research: Prof Jim Horne
- 2007: BSc (hons), Human Biology, First Class, Loughborough University, UK

Professional Status

FHEA (2020) Fellowship of the Higher Education Academy

CBiol (2012) Royal Society of Biology, UK: Professional status: Chartered Biologist, MRSB

Employment History

Oct 2020 - present Senior Lecturer of Human Factors in Transport Safety

Loughborough University School of Design and Creative Arts

- Strategic leadership in School and Centre committees.
- Leading a team of researchers
- Teaching on undergraduate and masters programmes

May 2018 – Sept 2020 Lecturer in Transport Safety

Loughborough University Design School

- Supervision of students and research assistants.
- Working in international research collaborations.

Feb 2016 – April 2018

Senior Research Associate (100% research), Supervisor: Prof Pete Thomas Loughborough University Design School

- Work Package leader on Horizon 2020 funded project SafetyCube.
- Leading the Loughborough research involvement in all work packages.
- Supervision of research staff.

Feb 2013 – Jan 2016 Research Fellow (100% research), Supervisor: Prof Narelle Haworth

Centre for Accident Research and Road Safety – Queensland (CARRS-Q)

Queensland University of Technology.

- Project manager ensuring completion of projects in a timely, cost effective manner.
- Involvement in centre strategic planning activities.

Feb 2011 – Feb 2013 Research Fellow (100% research), Supervisor: Dr Missy Rudin-Brown

Monash University Accident Research Centre (MUARC), Human Factors Team Monash University

- Developing and conducting driving simulator studies.
- Working on both large grant projects and industry funded research.

Honours and Awards

Competitive • awards •

- Prince Michael International Road Safety Award (2019) for SafetyCube project
- William Floyd Award of the Chartered Institute of Ergonomics and Human Factors (2019) for outstanding and innovative contribution by a single project: Application of contemporary systems based methods to reduce trauma at rail level crossings.
- British Sleep Society young sleep researcher award (2009).

Visiting Fellow

Queensland University of Technology (2019 – 2021) and (2016 - 2017)

Expert advisory

ADAS&Me EC H2020 project Expert Advisory Board

board /reviewer

• Expert reviewer Navigatus Consulting, NZ

Partnerships and collaborations

 Competitively awarded by the Health Collaborative Research Network in recognition of merit for existing research and for potential in establishing high performing and sustainable partnerships. Human Factors in Transport Exchange Program with Appleton Institute, Central Queensland University: Fatigue and SPAD risk.

Best conference paper

- The Peter Vulcan Award for best research paper at the 2013 Australasian Road Safety Research, Policing and Education Conference. Salmon, P. M., Lenné, M. G., Walker, G., & Filtness, A. J. (2013, August 28-30). Investigating the factors influencing cyclist awareness and behaviour: an on-road study of cyclist situation awareness.
- The best paper award at the 11th International Symposium of the Australian Aviation
 Psychology Association. Lenné, M., Salmon P.M., Beanland V., Stanton N.A., Filtness A.
 J. (2014, Nov) The application of decision-making paradigms to map real-world driver
 decision-making at rail level crossings.

Competitive training courses

- Selection on to the 2011 International Master Class in Biomechanics for Design for Injury Prevention, Loughborough University, UK. This 4 day classroom based training course was conducted by international experts, including a focus on anthropometry and ergonomics for design. A travel grant to attend was awarded.
- Selection to ESRS-EU Marie Curie FENS Project 2007 2010. Sleep Research Training Course and practical training. A 6 day residential training course in sleep research, a 5 day practical training at Sleep and Wake Disorders Center, Department of Neurology, University Hospital Zürich, Switzerland 2009 and a 5 day symposium.

Professional service and professional memberships

Editorial board

- Associate (handling) Editor, Safety Science, May 2021- present. ISSN:0925-7535, IF 4.9
- International editorial board, Applied Ergonomics. Nov 2016 present. ISSN:0003-6870, IF3.7

Guest editor

- Shiftwork special issue Chronobiology International (in prep) ISSN:0742-0528
- Fitness to Drive special issue Transportation Research Part F (2018). ISSN:1369-8478

Book editor Grant reviews

- Fatigue in Transportation (working title; in prep), CRC Press, co-editor Dr Rudin-Brown
- Independent expert Innovation and Networks Executive Agency (INEA) Mobility for growth European Commission Horizon 2020.
- Peer Reviewer Australian Research Council (ARC)

Manuscript • reviews

Applied Ergonomics, Accident Analysis and Prevention, Traffic Injury Prevention, IET Intelligent Transport Systems, IATSS, Human Factors of Ergonomics in Manufacturing and Service Industries, Safety Science, Journal of Psychosomatic Research, Journal of Sleep Research, Biological Psychology, Injury.

University service •

• Loughborough University Senate (elected member), School Athena SWAN subgroup member, School Outreach team member, School Research Events team member, School Research and Enterprise committee. Lead Loughborough University Sleep Research Network. Loughborough University Research Staff Association committee 2016-2018.

External • Committees

- European Sleep Research Society, Early Career Network Executive Committee 2014-16. Chair June 2015 Feb 2016.
- 2016 International Symposium on Somolence and Safety. Scientific Committee member
- Australasian College of Road Safety Queensland, 2015.

Memberships •

 European Sleep Research Society, Royal Society of Biology, UK Road Safety Policing Academic Network, Women's Higher Education Network (WHEN), Working Time Society

Supervision

Current (primary)

- Ph.D Rachel Talbot. Analysing road traffic crash causation from a systems-based perspective: applying the Driver Reliability and Error Analysis Method (DREAM).
- Ph.D Robert Philips. Fatigue in tunnelling operations.
- Ph.D Lloyd Jones. Driver coaching to improve safety

Current (secondary)

- Ph.D Charlotte Merrick. Multisensory integration of human wetness perception.
- Ph.D, Amy ODell "Investigating Interactions between vulnerable road users and autonomous vehicles" School of Design and Creative Arts, Loughborough University.

Completed

- Ph.D, Frances Pilkington-Cheney, "Individual Countermeasures to Driver Sleepiness" (2021) School of Design and Creative Arts, Loughborough University.
- PhD, Aikaterini Christogrianni, "Behavioural and Physiological thermoregulatory mechanisms implicated in heat and cold sensitivity in multiple sclerosis" (2021) School of Design and Creative Arts, Loughborough University.
- Ph.D, Alexander Kunze "Enhancing User Experience and Safety in the context of Automated Driving Through Uncertainty Communication" (2019)School of Design and Creative Arts, Loughborough University.
- BSc Hons, Marcus Adie "Use of mobile music devices to stream music in cars" (2020) School of Design and Creative Arts, Loughborough University.
- BSc Hons, Edward Morgan "An investigation into the effectiveness of a sugary snack as a countermeasure to driver sleepiness" (2020) School of Design and Creative Arts, Loughborough University.
- BSc Hons, Sophie Curzon "The effect of caffeine on sleep quality and subsequent morning driving performance" (2019) Design School, Loughborough University.
- Ph.D David Rodwell "Investigating Perceptions of emerging technology in Driver Education" (2018) Centre for Accident Research and Road Safety – Queensland, Queensland University of Technology. Primary supervisor 2015-2016.
- PGDip Psychology Peter Sheppard "Driver sleepiness in urban driving" (2016) Centre for Accident Research and Road Safety – Queensland, Queensland University of Technology
- PGDip Georgina Lavan "Driver personality and driver sleepiness in urban driving" (2016) Centre for Accident Research and Road Safety Queensland, Queensland University of Technology
- Vacation Research Scholar Alana Hawkins "Driver Sleepiness and social media" (2016) Output: one journal paper, one conference paper

Teaching

Loughborough University School of Design and Creative Arts (2018 - present)

Lecturing: Cognitive Ergonomics (DSP101), Transport Safety (DSP121),

<u>Workshops:</u> Design Research Methods (DSP851), <u>Project supervision:</u> UX Major Projects (DSP866)

Tutoring: Diploma of industrial studies (DSI001), Personal tutor

Invited lectures: Loughborough University (2017) Ergonomics BSc, Belarusian Road Safety Network/Loughborough University (2016) Road Safety MSc, Australian National University (2012) Biological Psychology BSc

Continued Professional Development

- My commitment CPD in activities related to human measurement (e.g. EEG and eye tracking) has been recognised by the Royal Society of Biology in awarding Chartered Biologist Status (2012 present).
- ILM Level 5 Diploma in Leadership and Management (2019). Modules completed: Becoming an effective leader, Human Resource Management, Leading Innovation and Change, Managing Improvement, Making a Financial Case, Project management, Understanding Financial Management, Understanding the impact of stress, the Importance of Marketing for the Organisation, Understanding the Management Role.
- Aurora Woman in Academic Leadership. Example modules: Identity, Impact and Voice.
- Loughborough University Centre for Academic Practice Taught Course (resulting in FHEA). Modules
 completed: Approaches to Learning and Teaching, Curriculum Design, Assessment, Inclusivity, Personal
 tutoring, Teaching small groups, Teaching large groups, Communicating research, Digital resources for
 teaching, Academic Enterprise, Embedding research and enterprise in the curriculum, Ph.D Examination

Research and Enterprise funding (>£3.5mil total)

Internationally competitive

Anund, A, Filtness, A.J et al., (2021) PANACEA Awarded by The European Commission H2020.
 ~€3.5mil Euro across 17 partners. ~€233k to home institute as PI

grants •

- Brijs, T, Filtness, A.J et al., (2019). iDreams Awarded by The European Commission H2020.
 ~€6.3mil Euro across 12 partners. ~€960k to home institute as PI
- Thomas, P., **Filtness, A.J** et al., (2018) Levitate. Awarded by The European Commission H2020. ~€6.4mil across 12 partners. ~€1.4mil to home institute.

National • competitive grants

- **Filtness, A.J.,** Talbot R., (2020) Reducing the risk of sleep-related crashes in young drivers. Awarded by Road Safety Research Grant Funding Support from Department for Transport. £73,746
- Morris, A., Thomas, P., Filtness, A.J et al., (2019) International Research Centre to Investigate
 the Effects of Vehicle Automation on Vulnerable Road Users (ICAROS). Awarded by Research
 England International Investment Initiative Funding (I3). ~£1.4mil across 3 partners. £435k to
 home institute.
- Watson, B., Bates, L., & Filtness, A. J. (2014, June) Developing and evaluating a theoretically grounded novice driver education program incorporating simulators. Awarded by Australian Research Council Linkage Projects. \$203,000, plus \$75,000 partner contribution.
- Beanland, V., & Filtness, A. J. (2014, July) Effects of sleep loss on change detection while driving. Awarded by the NRMA-ACT Road Safety Trust. \$51,814 home institute PI

Commercial • contract research •

- **Filtness, A.J.** (2020, Jan). Review of Go-Ahead fatigue event data collection form. Awarded by Go-Ahead London Ltd.,.
- **Filtness, A. J.**, Waterson, P. (2019, Dec) Understanding the factors affecting safety behaviours of controllers of site safety (COSSs). Awarded by Rail Accident Investigation Branch £22,855.
- **Filtness, A. J.**, Anund, A (2018, July). London Bus Driver Fatigue. Awarded by Transport For London.
- **Filtness, A.J,** Haslam, R., Gibb, A., Jones, W., (2018, May). Investigating fatigue in tunnelling workers. Awarded by Tideway
- Debnath, A., Haworth., N., Filtness A.J. Demmel, S. (2015 Oct). Road User Interaction with worksites
- Wishart, D., Biggs, B., Filtness, A.J., Watson, A., Rowland, B., Schramm, A, Haworth, N. (2015, Mar). Research proposal to reduce the crash involvement of taxis in Queensland: Situational analysis and crash and exposure analyses. Awarded by the Motor Accident Insurance Commission (MAIC).
- Freeman, J., Watson, A., **Filtness, A.J.,** Wilson, H., Siskind V. (2015, Feb). Understanding drink-drivers, their re-offence and crash rates and the impact of sanctions. Awarded by VicRoads, State Government of Victoria.
- Laure, G., **Filtness, A.J.**, Wood, J., Naweed, A., Rakotoniraiy, A (2015, Jan). Review of stop sign level crossing sighting distance. Awarded by Australasian Centre for Rail Innovation.
- Rakotonirainy, A., Filtness, A. J*., Demmel, S., Blackman, R., Wishart D (2014, Dec). Literature
 and Product Review of Motorcycle Instrumentation Systems for Naturalistic Riding Studies.
 Awarded by Transport for New South Wales.
- Smith, S., **Filtness, A.J*.,** Rowland, B. (2014, Nov) Review of taxi driver fatigue. Awarded by Transport for New South Wales.
- Freeman, J., Armstrong, K., Palk, G., **Filtness, A. J***., Davey, J., & Kiata-Holland, E. (2014, April) Drug driving policy review. Awarded by Transport for New South Wales
- Watson, B., Bates, L., Filtness, A. J., & Fleiter, J. (2013, August) Research services to investigate how changing driver training in the Queensland licensing system would affect road safety. Awarded by Queensland Department of Transport and Main Roads.
- Rakotonirainy, A., Filtness, A. J*., Larue, G., & Schramm, A. (2013, July) Ability to absorb information from electronic and static signs (Austroads NT1782). Partnership program contract with ARRB. Awarded by ARRB.
- Freeman, J., **Filtness, A. J,** Armstrong, K., Sheehan, M. & Fleiter, J. (2013, February) Options for rehabilitation in alcohol interlock programs (SS1755). Awarded by Austroads.

- Rudin-Brown, C. M., Filtness, A. J., Lenné, M. G., & Young, K. L. (2011, July) Operational Pilot of electronic work diaries (EWD) and speed monitoring systems Stage 1. Awarded by Transport Certification Australia Ltd. (TCA)
- Rudin-Brown, C. M, Filtness, A. J., Lenné, M. G., Logan, D., & Young, K.L. (2011, April) TCA
 Electronic Work Diaries Operational Pilot. Awarded by TCA

Competitive • Internal University Grants •

- Filtness A.J., Smith S (2015, May) Caffeine and rear-end crashes in urban driving; developing a new test paradigm. Awarded by Queensland University of Technology Institute of Health and Biomedical Innovation.
- Freeman J., Larue G., **Filtness A.J.**, Delhomme P (2015, May) Good intention but bad judgement? An intelligent transport system study to examine objective and subjective driving performance. Awarded by Queensland University of Technology Institute of Health and Biomedical Innovation
- Naweed, A, Filtness, A.J. (2014, Oct) Human factors in Transport Exchange Program: Fatigue and SPAD risk. Awarded by Health Collaborative Research Network (CRN) University Exchange Program.
- **Filtness, A. J.** (2014, Aug) Understanding sleepy drivers: towards development of a targeted intervention. Mentors: Smith, S., & Anund, A. Awarded by Queensland University of Technology, Institute of Health and Biomedical Innovation Early Career Research award scheme.
- **Filtness, A. J.**, Davey J., & Beanland, V. (2013, August) Proof of concept investigation into time of day effects on attentional blink. Awarded by Queensland University of Technology Institute of Health and Biomedical Innovation.

Publications and Research Output

Peer reviewed Journal 1. Maynard, S., Miller, K., & **Filtness, A.,** (2022) Keeping the service running: Examining working relationships and workload of London bus network iBus controllers. *Applied Ergonomics, 98,* 103577

Articles

- 2. Morris, A. P., Haworth, N., **Filtness, A.**, Nguatem, D. P. A., Brown, L., Rakotonirainy, A., & Glaser, S. (2021). Autonomous Vehicles and Vulnerable Road-Users—Important Considerations and Requirements Based on Crash Data from Two Countries. *Behavioral Sciences*, *11*(7), 101.
- 3. Forsman, A., Anund, A., Skyving, M, Filtness, A.J (2021). Injury crashes and relationship with disease causing excessive day time sleepiness. Traffic Injury Prevention, 22(4), 272-277
- 4. Michelaraki E., Katrakaza C., Yannia, G., **Filtness, A.J.**, Talbot R., Hancox, G., Pilkington-Cheney F., Brijs K., Ross, V., Dirix, H., Neven A., Paul, R., Brijs, T., Fortsakis, P., Frantzola E.K., Taveira R (2021). Post-trip Safety Interventions: State of the art challenges and practical implications. Journal of Safety Research.
- 5. Walker, G., Mendes, L. M. N., Lenne, M., Young, K., Stevens, N., Read, G., Beanland V., Filtness, A., Stanton, N., & Salmon, P. (2021) Modelling driver decision-making at railway level crossings using the abstraction decomposition space. *Cognition, Technology & Work*, 1-13.
- 6. Maynard, S., **Filtness, A.**, Miller, K., & Pilkington-Cheney, F. (2021). Bus driver fatigue: A qualitative study of drivers in London. Applied Ergonomics, 92, 103309.
- 7. **Filtness, A. J.**, Beanland, V., Miller, K. A., Larue, G. S., & Hawkins, A. (2020). Sleep loss and change detection in simulated driving. Chronobiology International
- 8. Pilkington-Cheney, F., **Filtness, A. J.**, & Haslam, C. (2020). A qualitative study exploring how city bus drivers manage sleepiness and fatigue. Chronobiology international.
- 9. Maynard, S., Jones, W., **Filtness, A**., Gibb, A., & Haslam, R. (2021) Going underground: fatigue and sleepiness in tunnelling operations. Applied Ergonomics, 90, 103237
- 10. Miller, K. A., **Filtness, A. J.**, Anund, A., Maynard, S. E., & Pilkington-Cheney, F. (2020). Contributory factors to sleepiness amongst London bus drivers. Transportation Research Part F: Traffic Psychology and Behaviour, *73*, 415-424.
- 11. **Filtness, A.J**, Hickman, J, Mabry, J.E, Glenn, , Mao H, Camden, M, Hanowski, R.J (2020). Associations between high caffeine consumption, driving safety indicators, sleep and health behaviours in truck drivers. Safety Science, 126.

^{*}Project Manager

- 12. Shenfield, L., Beanland, V., Filtness, A., & Apthorp, D. (2020). The impact of sleep loss on sustained and transient attention: an EEG study. PeerJ, 8, e8960.
- 13. Pilkington-Cheney, F., **Filtness, A.J.**, Jones, W., Maynard, S., Gibb, A.G.F., Haslam, R. (2020) Biomathematical modelling for fatigue management in construction. Proceedings of the Institution of Civil Engineers Civil Engineering. March, 1-6.
- 14. Pilkington-Cheney, F., **Filtness, A.J.**, Haslam C. (2019) Sleepiness, shift work and sleep related road crashes. Journal of Personal Injury Law. Issue 4. 231-238.
- 15. Samuel, O., Walker, G., Salmon, P., **Filtness, A**., Stevens, N., Mulvihill, C., Payne S & Stanton, N. (2019). Riding the emotional roller-coaster: Using the circumplex model of affect to model motorcycle riders' emotional state-changes at intersections. Transportation Research Part F: Traffic Psychology and Behaviour, 66, 139-150.
- 16. Bates, L., Hawkins, A., **Filtness, A**. & Larue, G. (2019). Simulators, driver education and disadvantaged groups: A scoping review, Journal of the Australasian College of Road Safety
- 17. Rodwell, D., Hawkins, A., Haworth, N., Larue, G., Bates, L., & **Filtness, A**. (2019). What do driver educators and young drivers think about driving simulators? A qualitative draw-and-talk study. Transportation Research Part F, 62:282-293.
- 18. Papadimitriou, E., **Filtness, A.J.,** Theofilatos, A., Ziakopoulos, A., Quigle, C & Yannis, G. (2019). Reviewing and ranking of crash risk factors related to the road infrastructure. Accident analysis and prevention, 125, 85-97.
- 19. Bates, L., Hawkins, A., Rodwell, D., Anderson, L., Watson, B., **Filtness, A. J.**, & Larue, G. S. (2019). The effect of psychosocial factors on perceptions of driver education using the goals for driver education framework. *Transportation research part F: traffic psychology and behaviour*, 66, 151-161.
- 20. Salmon, P., Read, G., Beanland, V., Thompson, J., **Filtness, A.**, Hulme, A., McClure R & Johnston, I. (2019) Bad behaviour or societal failure? Perceptions of the factors contributing to drivers' engagement in the fatal five driving behaviours. Applied Ergonomics, 74, 162-171
- 21. Pérez, K., Weijermars, W., Bos, N., **Filtness, A.J.**, Bauer, R., Johannsen, H., Nuyttens, N., Pascal, L., Thomas, P., Olabarria, M. (2019) Implications of estimating road traffic serious injuries from hospital data. Accident Analysis and Prevention 130,125-135.
- 22. Kunze, A., Summerskill, S. J., Marshall, R., & **Filtness, A. J.** (2019). Function-Specific Uncertainty Communication in Automated Driving. *International Journal of Mobile Human Computer Interaction (IJMHCI)*, 11(2), 75-97.
- 23. Martensen, H., Diependaele, K., Daniels, S., Van den Berghe, W., Papadimitriou, E., Yannis, G., Van Schagen, I., Weijermars, W., Wihnen W., Filtness, A., Talbot, R., Thomas P., Machata, K., Aigner-Breuss, E., Kaiser, S., Hermitte, T., Thomson, R. & Elvik, R (2018). The European road safety decision support system on risks and measures. Accident Analysis & Prevention.
- 24. Kunze, A., Summerskill, S. J., Marshall, R., & **Filtness, A. J**. (2018). Automation Transparency: Implications of Uncertainty Communication for Human-Automation Interaction and Interfaces. Ergonomics, 66(3) 345-260.
- 25. Rodwell, D., Hawkins, A., Haworth, N., Larue, G., Bates, L., & **Filtness, A.** (2018) A mixed-methods study of driver education informed by the Goals for Driver Education: Do educators and young drivers agree on what was taught?, Safety Science, 108, 140-148.
- 26. Weijermars, W., Bos, N., Schoeters, A., Meunier J., Nuyttens N., Dupont, E., Machata K., Bauer R., Perez K., Martin, J., Johansson H., Filtness, A., Brown., Thomas P (2018) Serious road traffic injuries in Europe, Lessons from the EU research project SafetyCube. Transportation Research Record.
- 27. Larue, G., **Filtness, A.J.,** Wood, J., Demmel, S., Watling, C., Naweed, A., Rakotonirainy, A (2018) Is it safe to cross? Identification of trains and their approach speed at level crossings. Safety Science, 103, 33-42.
- 28. Weijermars, W., Bos, N., **Filtness, A.J.**, Brown, L., Bauer, R., Dupont, E., Martin, J.L., Perez, K., Thomas, P. (2018). Burden of injury of serious road injuries in six EU countries. Accident Analysis and Prevention, 111, 184-192.
- 29. **Filtness A.J.,** Beanland V., Sleep loss and change detection in driving scenes. (2018) Transportation Research Part F. 57, 10-22
- 30. Beanland, V., Salmon, P., **Filtness, A.J.**, Lenné M.G, Stanton, N. (2017) To stop or not to stop: Contrasting compliant and non-compliant driver behaviour at rural rail level crossings. Accident Analysis and Prevention, 108, 209-219.

- 31. Watson, A., Freeman, J., Imberger, K., **Filtness, A.J.**, Wilson, H., Healy, D., Cavallo, A (2017) The effects of licence disqualification on drink-drivers:is it the same for everyone?. Accident Analysis and Prevention, 107, 40-47.
- 32. **Filtness A.J.,** Larue G., Schramm A., Fuller J., Rakotonirainy A., Han C., Cairney P.(2017) Safety implications of co-locating road signs: a driving simulator investigation. Transportation Research Part F, 47, 187-198
- 33. Cox J., Beanland V., **Filtness A.J.** (2017) Risk and Safety perception on urban and rural roads: Effects of environmental features, driver age and risk sensitivity. Traffic Injury Prevention, 18 (7), 703-710.
- 34. Beanland V., **Filtness A.J.**, Jeans R. (2017) Change detection in urban and rural driving scenes: Effects of change target and safety relevance on change blindness. Accident Analysis and Prevention, 100, 111-122.
- 35. **Filtness, A. J.**, Armstrong K., Watson A., Simth S.S. (2017) Sleep-related vehicle crashes on low speed roads. Accident Analysis and Prevention, 99 Part A, 279-286.
- 36. **Filtness, A.J.,** Naweed, A. (2017) Causes, consequences and countermeasures to driver sleepiness in the rail industry. Applied Ergonomics, 60, 12-21.
- 37. **Filtness, A. J.**, Armstrong K., Watson A., Simth S.S. (2017) Sleep-related crash characteristics: Implications for applying a fatigue definition to crash reports. Accident Analysis and Prevention, 99, Part B, 440-444.
- 38. Hawkins, A., **Filtness, A.J.** (2017) Driver sleepiness on YouTube: A content analysis. Accident Analysis and Prevention, 99, Part B, 459-464.
- 39. Anund, A., Ihstrom, J., Fors C., Kecklund, G., **Filtness, A.J.** (2016) Factors associated with self-reported driver sleepiness in city bus drivers. Industrial Health, 54(4), 337-346.
- 40. Stefanova, T., Burkardt, J-M., **Filtness, A.J.**, Wullems, C., Rakotonirainy, A., Delhomme, P. (2015) Systems-based approach to investigate unsafe pedestrian behaviour at level crossings. Accident Analysis and Prevention, 81, 167-186
- 41. Cain, S.W., **Filtness A.J.**, Phillips, C., Anderson, C. (2015) Enhanced preference for high fat foods following a simulated night shift. Scandinavian Journal of Work, Environment and Health. 41(3), 288-93
- 42. **Filtness A.J.,** Goode N., Cook R. (2014) Causal factors of hot air ballooning incidents: identification, frequency and potential impact. Aviation, Space and Environmental Medicine, 85(12), 1190-1198.
- 43. **Filtness, A. J.**, Mackenzie, J., Armstrong K. (2014). Longitudinal change in sleep and daytime sleepiness in postpartum women. PLOS ONE, 9 (7), e103513.
- 44. Salmon P.M., Lenné M.G., Walker G. Stanton N.A., **Filtness, A. J.** (2014). Using the Event Analysis of Systemic Teamwork (EAST) to explore conflicts between different road user groups when making right hand turns at urban intersections. Ergonomics, 57(11), 1628-1642.
- 45. **Filtness A.J.,** Anund A., Fors C., Ahlström C., Åkerstedt T., Kecklund G. (2014). Sleep related eye symptoms and their potential for identifying driver sleepiness. Journal of Sleep Research, 23(5), 568-575.
- 46. **Filtness A. J.,** Mitsopoulos-Rubens E., Rudin-Brown M (2014). Police officer in-vehicle discomfort: appointments carriage method and vehicle seat features. Applied Ergonomics, 45(4), 1247-1256.
- 47. Salmon P.M., Lenné M.G., Walker G. Stanton N.A., **Filtness, A. J.** (2014) Exploring schema-driven differences in situation awareness across road users: an on-road study of driver, cyclist and motorcyclist situation awareness. Ergonomics, 57(2), 191-209
- 48. Armstrong K., **Filtness A. J.**, Watling C., Barraclough P., Haworth N. (2013). Efficacy of proxy definitions for identification of fatigue/sleep-related crashes: an Australian evaluation. Transportation Research Part F, 21, 242-252
- Filtness A. J., Rudin-Brown M., Mulvihill C.M., Lenné M.G. (2013). Impairment of simulated motorcycle riding performance under low dose alcohol. Accident Analysis and Prevention, 50, 608-615.
- 50. Rudin-Brown M., **Filtness A. J.**, Allen A., Mulvihill, C.M. (2013). Performance of a cognitive, but not visual, secondary task interacts with alcohol-induced balance impairment in novice and experienced motorcycle riders . Accident Analysis and Prevention, 50, 895-904.

- 51. **Filtness A. J.**, Reyner L. A., Horne J. A. (2012). One night's CPAP withdrawal in otherwise compliant OSA patients: marked driving impairment but good awareness of increased sleepiness. Sleep and Breathing, 16(3), 865-871.
- 52. **Filtness A. J.**, Reyner L. A., Horne J. A. (2012). Driver sleepiness comparisons between young and older men during a monotonous afternoon simulated drive. Biological Psychology, 89(3), 580 583.
- 53. **Filtness A.J.**, Reyner L.A., Horne J.A. (2011). Moderate sleep restriction in treated older male OSA participants: greater impairment during monotonous driving compared with controls. Sleep Medicine, 12(9), 838-843.

Peer Reviewed Conferenc e Papers

- Michelarakia, E., Katrakazas, C., Yannis, G., Filtness, A., Talbot, R., Hancox, G., Pilkington-Cheney, F., Brijs T., Brijs, K., Ross, V., Dirix, H., Neven, A., Paul, R., Fortsakis, P., Frantzola, EK & Taveira, R. (2021 Oct) State-of-the-art Technolgies for Post Trip Safety Interventions. *In Proceedings of the 7th Humanish Conference, Rhodes, Greece.*
- 2. Pilkington-Cheney, F., Afghari, A., **Filtness, A.**, Papadimitriou, E., Lourenco, A & Brijs T (June 2021). The iDREAMS intervention strategies to reduce driver fatigue and sleepiness for different transport modes. *In Proceedings of the 7th International IEEE Conference on Models and Technologies for Intelligent Transportation Systems.*
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- 10. Rodwell, D., Hawkins, A., Bates, L., Larue, G., Haworth, N. & **Filtness, A.** (2017). Mismatches between trainee and educator perceptions regarding the use and value of driving simulators. 2017 Australasian Road Safety Conference, 10 12 October, Perth.
- 11. Hawkins, A., Rodwell, D., Bates, L., Larue, G. & **Filtness, A**. (2017). Developing a technology based driver education intervention: theory and practice, Australasian Road Safety Conference, Perth, 10-12 October.
- 12. Bauer,R., Pérez, K., Weijermars, W., Bos, N., **Filtness, A.J.**, Johannsen, H., Pascal, L., Nuyttens, N., Olabarria, M. Measuring the severity of road injuries in the EU, European Journal of Public Health, Volume 27, Issue suppl_3, 1 November 2017
- 13. **Filtness A.J.,** Talbot R., Thomas P., Aigner-Breuss E., Kaiser S., Martensen H., Papadimitriou E.(2017, Mar). Obstructive sleep apnoea and crash risk: Case study results within the development of the European road safety Decision Support System. Paper to be presented at 10th international conference on Managing Fatigue. San Diego, USA. Paper to be presented at 10th international conference on Managing Fatigue. San Diego, USA.
- 14. **Filtness A.J.,** Beanland V., Larue G., Hawkins A (2017, Mar). Sleep loss and change detection: a driving simulator study. Paper to be presented at 10th international conference on Managing Fatigue. San Diego, USA.
- 15. **Filtness A.J.,** Beanland, V., Jeans R. (2016, Feb). Sleep-Related impairment at detecting changes in rural driving scenes. Paper to presented at SomnoSafe. Brussels, Belgium.
- 16. Beanland, V. C., Salmon, P., Young, K. L., **Filtness, A.**, Read, G. J. M., Lenne, M. G., & Stanton, N. A. (2016). Differences in drivers' perception and interactions with boom-controlled rail level crossings in urban versus rural environments. In *Australasian College of Road Safety Conference 2016: Agility, Innovation, IMPACT!*.
- 17. **Filtness A.J.,** Naweed A (2015, Nov). Fatigue in the rail industry: The driver's perspective. Paper presented at the 4th International Conference on Driver Distraction and Inattention. Sydney, Australia.
- 18. Beanland V., **Filtness A.J.**, Jeans R. (2015, Nov). Effects of sleep loss on change detection in urban and rural driving scenes. Paper presented at the 4th International Conference on Driver Distraction and Inattention. Sydney, Australia.
- 19. **Filtness A.J.**, Armstrong K., Watson A., Smith S. (2015, March 23-26). Sleep-related crashes in high speed environments. Presented at 9th International Conference on Managing Fatigue. Fremantle, Australia.
- Freeman J., Kiata-Holland E., Filtness A.J., Palk G., Armstrong K., Davey J. (2015 March 17-20). Directions for the future: A Comparative analysis of emerging international drug driving policies. Presentation at the 7th Australasian Drug and Alcohol Strategy Conference. Brisbane, Australia.
- 21. Lenné, M., Salmon P.M., Beanland V., Stanton N.A., **Filtness A. J.** (2014, Nov) The application of decision-making paradigms to map real-world driver decision-making at rail level crossings. Oral presentation, 11th International Symposium of the Australian Aviation Psychology Association, Melbourne, Australia. **Recipient of Best Paper Award.**
- 22. **Filtness A.J.**, Beanland V. (2014, Sept). Sleep restriction impairs vigilance but not temporal attention. Poster presentation at the European Sleep Research Society meeting, Tallinn, Estonia.

- 23. Filtness A.J., Armstrong K., Watson A. (2014, Sept) Sleep related crashes in urban, low speed environments. Poster presentation at the European Sleep Research Society meeting, Tallinn, Estonia.
- 24. Goode N., Salmon P.M., Lenné M.G., Walker G. Filtness A. J. (2014, July). An analysis of cyclist situation awareness during near collisions with motor vehicles: failure of the road or road user? Oral presentation, International Conference of Applied Psychology, Paris, France.
- 25. Filtness A.J., Mackenzie J., Armstrong K. (2013, Oct). Hush-a-by mummy: interactions between co-sleeping and maternal sleep disturbance. Poster presentation, Australian Sleep Association Conference, Brisbane, Australia
- 26. Lenné M. G., Beanland V., Salmon P. M., Filtness A. J., Stanton N. A., Triggs, T. J. (2012). Onroad assessment of driver behaviour at regional highway-rail grade crossings. In Proceedings of the 4th International Conference on Applied Human Factors and Ergonomics. San Francisco, USA.
- 27. Filtness A. J., Reyner L. A., Horne J. A. (2011, Oct). One night CPAP withdrawal impairs performance at a driving simulator task faster than sleep restriction to 5 hours with treatment in OSA patients. Poster presentation at the World Sleep Conference, Kyoto, Japan.
- 28. Filtness A. J., Reyner L. A., Horne, J. A. (2011, Oct). Prevalence of risk factors for undiagnosed obstructive sleep apnoea is high in truck drivers on UK roads. Poster presentation at the World Sleep Conference, Kyoto, Japan.
- 29. Filtness A. J., Reyner, L. A. (2010, Sept). Is the two hour recommended maximum driving time appropriate for both healthy older and treated obstructive sleep apnoea drivers? Oral presentation at the European Sleep Research Society meeting, Lisbon, Portugal.
- 30. Filtness A. J., Reyner L. A. (2010, Sept). Continuous Positive Air Pressure treatment for Obstructive Sleep Apnoea patients: effects on sleep quality and quantity as measured by Actigraphy. Poster presentation at the European Sleep Research Society meeting, Lisbon, Portugal.
- 31. Filtness A. J., Reyner, L. A. (2010, Sept). Driver sleepiness in younger and older participants. Paper presented at the British Sleep Society annual meeting, Cambridge, UK.
- 32. Filtness A. J., Reyner L. A. (2010, June). Countermeasures to driver sleepiness: is the message getting through? Poster presentation at SLEEP meeting of the American Academy of Sleep Medicine and the Sleep Research Society, San Antonio, USA.
- 49. Filtness A. J., Reyner, L. A. (2009, Sept). Sleep restriction increases driving risk in treated obstructive sleep apnoea patients. Paper presented at the British Sleep Society annual meeting, Cambridge, UK.

e papers (non-peer review)

- Conferenc 1. Papadimitrioua E., Yannis G., Theofilatosa A., Thomas P., Filtness A.J., Martensen H., Machatad K., Elvike R., Shingo Usamif D. (2016, Oct) Development of a road safety Decision Support System for road infrastructure. 1st European Road Infrastructure Congress. Leeds, UK.
 - Thomas P., Filtness A.J., Yannis G., Papadimitrioua E., Theofilatosa A., Martensen H., Diependaele K. (2016, June) Developing the european Road Safety Decision Support system. Expert Symposium on Accident Research. Hannover, Germany.

Magazine **Articles**

- 1. Jones, W., Filtness, A. J., Haslam, R., Gibb, A. G., & Stuttard, N. (2019). Waking up to fatigue. Tunnelling Journal 28, TGS Media Ltd https://repository.lboro.ac.uk/articles/Waking up to fatigue/9352931
- Naweed, A., & Filtness, A.J. (2015). Fatigue & sleepiness: Complex bedfellows [Safety]. Track & Signal, 19(1), 60-61. Circulation 7,000
- 3. Filtness A.J., Goode N., Cook R, Eighani G (2015) What causes hot air balloon accidents? Aerostat, Journal of the British Balloon and Airship Club. 46(6), 16-17.
- 4. Filtness A.J., Goode N., Cook R, Eighani G (2015) What causes hot air balloon accidents? Ballooning, Journal of the Ballooning Federation of America. Sept/Oct. 2015, 48(4), 30-32.
- 5. Filtness A.J., Goode N., Cook R, Eighani G (2015) Prepare and prevent, don't repair and repent: Causal factors of hot air ballooning incidents. Aeronotes, the official journal of the Australian Ballooning Federation 37(2), 8-10. ISSN:1036-8264

6. **Filtness A.J.,** Goode N., Cook R, Eighani G (2015) When should ballooning incidents be reported? Aeronotes, the official journal of the Australian Ballooning Federation 37(3), 6-7. ISSN:1036-8264

Invited Speaker

- Filtness, A.J., (2020, October) Driver Fatigue: what we know and what we don't know. Ireland Road Safety Authority Annual Academic Lecture.
- 2019 Filtness, A.J., (2019, Nov) Bus driver fatigue TfL Bus Safety Summit
 - **Filtness, A.J.,** (2019, Sept) Bus driver fatigue Confederation of Passenger Transport UK Road Operations Committee meeting.
- Thomas P., Filtness A.J. (2017, Feb) SafetyCube project. Department for Transport, UK.
- **Filtness A.J** (2016, Oct) SafetyCube project. Queensland Road Safety Research Network. Queensland University of Technology, Brisbane, Australia.
- **Filtness A. J.** (2015, July) Understanding Driver Sleepiness: characteristics, causes and cultural acceptance. Transport Research Laboratory, Wokingham, UK.
 - **Filtness A.J.,** Goode N., Cook R. (2015, June) Causal factors of hot air ballooning incidents and incident reporting culture Sports Aviation Safety Forum of the Civil Aviation Safety Authority. Sydney, Australia
 - **Filtness A.J.,** (2015, June) Older vs Young drivers and the effect of sleep restriction. Queensland University of Technology Community of former Staff Alumni Group.
 - **Filtness A. J.** (2015, Feb) Understanding Driver Sleepiness: characteristics, causes and cultural acceptance. Central Queensland University, Appleton Institute, Adelaide, Australia.
- Filtness A. J. (2013, Oct) Obstructive Sleep Apnoea and Daytime Driver Sleepiness. Nottingham University Accident Research Unit, UK.
 - **Filtness A. J.** (2013, Oct) Obstructive Sleep Apnoea and Daytime Driver Sleepiness. Leeds University Institute of Transport Studies, UK.
 - **Filtness A. J.** (2013, Sept) Obstructive Sleep Apnoea and Daytime Driver Sleepiness. Swedish Road Transport Institute (VTI), Linkoping, Sweden.
 - **Filtness A.J.**, Goode N., Cook R. (2013, June) An investigation into the factors contributing to hot air balloon incidents. Sports Aviation Safety Forum of the Civil Aviation Safety Authority. Sydney, Australia.
 - **Filtness A. J.** (2013, April) Obstructive Sleep Apnoea and Daytime Driver Sleepiness. Woolcock Institute of Medical Research, Sydney, Australia.
- Filtness A.J. (2012, Oct) Sleep The most important thing you will do today. Monash University Mental Health week. Melbourne, Australia.
- **Filtness A.J.,** Reyner L.A. (2010, April) Obstructive sleep apnoea and driving. Oral presentation at Leicester Sleep Apnoea Patients Association (LSAPA) annual general meeting. Leicester, UK.

Example Media and Publicity

Television

- Lofthouse A and Downes M (Presenters). 2015. Channel 9, Brisbane, National Nine News, 16 Oct 6:30PM. Topic: Road safety experts are learning why sleepy drivers crash through YouTube videos.
- Wilding, R (Presenter). 2008. BBC One's The One Show (national). Topic: Obstructive sleep apnoea and driver tiredness.
- Ashby, M (Presenter). 2007. BBC One's Inside Out East Midlands (regional). Topic: Sleepiness in young drivers.
- 98five Sonshine FM (Western Australia). 2014, August 5. [Radio interview with Polly and Moro].
 Breakfast show. Topic: New mums still excessively sleepy.
 - ABC Brisbane (Queensland). 2015, September 15 (Radio interview with Emma Griffiths). Drive show. Topic: Stop and revive those tired eyes http://blogs.abc.net.au/queensland/2015/09/stop-and-revive-those-tired-eyes.html

 Att. S1 Ep6. Tired to death – why we need to talk about sleep and fatigue https://activetrainingteam.co.uk/podcasts/view/6

Online • News
Stories

Caffeine consumption in truck drivers 2020

Commercial motor https://www.commercialmotor.com/news/product/warning-issued-over-high-caffeine-consumption-truck-drivers

Fleet owner https://www.fleetowner.com/news/article/21126403/truck-drivers-who-drink-more-caffeine-are-in-more-crashes-study-says

Driver sleepiness on YouTube, 2015

Central Telegraph: http://www.centraltelegraph.com.au/news/videos-show-sleep-drivers-dicing-death/2809353/

Science Daily: http://www.sciencedaily.com/releases/2015/10/151020103837.htm

• Driver simulator research. 2015 Brisbane times.

http://www.brisbanetimes.com.au/queensland/why-so-angry-researchers-try-to-get-in-the-minds-of-young-drivers-20151002-gk09bp.html

• Sleep related eye symptoms. 2015

Medical xpress http://medicalxpress.com/news/2015-09-sleepy.html
Health canal http://www.healthcanal.com/disorders-conditions/sleep/66915-do-you-know-the-signs-of-being-too-sleepy-to-drive-carrs-q-study.html

New mums excessively tired at four months. 2014,

The Australian: http://www.theaustralian.com.au/news/latest-news/new-mums-excessively-tired-at-four-months/story-fn3dxiwe-1227010136040

The Herald sun: http://www.heraldsun.com.au/news/breaking-news/new-mums-excessively-tired-at-four-months/story-fni0xqi4-1227010136040

The Daily Telegraph: http://www.dailytelegraph.com.au/news/breaking-news/new-mums-excessively-tired-at-four-months/story-fni0xqi3-1227010136040

The Courier Mail: http://www.couriermail.com.au/news/breaking-news/new-mums-excessively-tired-at-four-months/story-fnihsfrf-1227010136040

Daily Mail: http://www.mailonsunday.co.uk/health/article-2715346/Why-new-mothers-shouldnt-rush-work-Many-exhausted-four-months-giving-birth.html

The New Zealand Herald:

http://www.nzherald.co.nz/lifestyle/news/article.cfm?c_id=6&objectid=11304206

Young male drivers more vulnerable than older men to sleepiness.

ABC news:

 $\underline{\text{http://www.abc.net.au/science/articles/2012/02/29/3441594.htm?site=science/memory\&topic=latest}$

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Future Transport, ask the expert Loughborough University

https://www.youtube.com/watch?v=KMBvGzg-q9c&feature=youtu.be

- More caffeine is not the answer 2020. https://www.lboro.ac.uk/media-centre/press-releases/2020/march/caffeine-not-answer-for-tired-lorry-drivers/
- Loughborough's lifesaving road safety research given royal recognition
 2019.https://www.lboro.ac.uk/media-centre/press-releases/2019/december/road-safety-award-prince-michael-of-kent/
- New measures to tackle bus driver fatigue. 2019. https://www.lboro.ac.uk/media-centre/press-releases/2019/august/bus-driver-fatigue-research/