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Research interests

Main research interests include: Ergonomics; Usability; Occupational Safety; Fuzzy Logic; Intelligent Decision Support Systems.

Employment

Associate Professor (with Habilitation)

DEMI - Departamento de Engenharia Mecânica e Industrial
Universidade NOVA de Lisboa
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1 Oct 1991 → present

Researcher

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1 Jan 2013 → present

Research outputs

Research › Article

Zarte, Maximilian ; Pechmann, Agnes ; Nunes, Isabel L. / **Problems, Needs, and Challenges of a Sustainability-Based Production Planning**. In: Sustainability. 2022 ; Vol. 14, No. 7.

Zarte, Maximilian ; Pechmann, Agnes ; Nunes, Isabel L. / **Knowledge framework for production planning and controlling considering sustainability aspects in smart factories**. In: Journal of Cleaner Production. 2022 ; Vol. 363.

Zarte, Maximilian ; Pechmann, Agnes ; Nunes, Isabel L. / **Fuzzy inference model for decision support in sustainable production planning processes—a case study**. In: Sustainability. 2021 ; Vol. 13, No. 3. pp. 1-31.

Zarte, Maximilian ; Pechmann, Agnes ; Nunes, Isabel L. / **Indicator framework for sustainable production planning and controlling**. In: International Journal of Sustainable Engineering. 2019 ; Vol. 12, No. 3. pp. 149-158.

Pilco, Henry ; Sanchez-Gordon, Sandra ; Calle-Jimenez, Tania et al. / **An agile approach to improve the usability of a physical telerehabilitation platform**. In: Applied Sciences (Switzerland). 2019 ; Vol. 9, No. 3.

Nunes, Isabel L. / **Integration of Ergonomics and Lean Six Sigma. A Model Proposal**. In: Procedia Manufacturing. 2015 ; Vol. 3. pp. 890-897.

Nunes, Isabel L. ; Simões-Marques, M. J. / **Exploiting the Potential and Facing the Challenges of Mobile Devices : Application Examples**. In: Procedia Manufacturing. 2015 ; Vol. 3. pp. 807-814.

Nunes, Isabel L. ; Machado, Virgílio António Cruz. / **A supply chain disturbance management fuzzy decision support system**. In: International Journal Of Industrial And Systems Engineering. 2014 ; Vol. 18, No. 3. pp. 306-334.

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Pinto, Abel R. ; Nunes, Isabel L. ; Ribeiro, Maria Rita Sarmiento de Almeida et al. / **Aplicação preliminar do método QRAM para avaliação de riscos para segurança ocupacional na construção civil**. In: Producao. 2013 ; Vol. 23, No. 2. pp. 375-386.

Nunes, Isabel L. / **Analysis and risk assessment of work-related musculoskeletal disorders in a physical rehabilitation unit**. In: International Journal of Human Factors and Ergonomics. 2012 ; Vol. 1, No. 4. pp. 318-332.

Nunes, Isabel L. / **Fuzzy systems to support Industrial Engineering Management**. In: Journal of Applied Engineering Science. 2012 ; Vol. 10, No. 3. pp. 143 - 146.

Nunes, Isabel L. / **The nexus between OSH and subcontracting**. In: WORK: A Journal of Prevention, Assessment & Rehabilitation. 2012 ; Vol. 41, No. NA. pp. 3062-3068.

Machado, Virgílio António Cruz ; Nunes, Isabel L. / **Integration of human factors principles in LARG organizations - a conceptual model**. In: WORK: A Journal of Prevention, Assessment & Rehabilitation. 2012 ; Vol. 41, No. NA. pp. 1712-1719.

Nunes, Isabel L. ; Ribeiro, Maria Rita Sarmiento de Almeida. / **Fuzzy approach for reducing subjectivity in estimating occupational accident severity**. In: Accident; analysis and prevention. 2012 ; Vol. 45, No. 2. pp. 281-290.

Machado, Virgílio António Cruz ; Nunes, Isabel L. / **A Fuzzy Expert System Model to Deal with Supply Chain Disturbances**. In: International Journal of Decision Sciences, Risk and Management. 2012 ; Vol. 4, No. NA. pp. 127-151.

Pinto, A ; Nunes, Isabel L. ; Ribeiro, Rita A. / **Método de Avaliação de Riscos para a Segurança Ocupacional na Indústria da Construção**. In: Territorium. 2011 ; Vol. 18, No. NA. pp. 55-72.

Puga-leal, Rogério Salema Araújo ; Nunes, Isabel L. / **An exploratory study of the Work Ability Index (WAI) and its components in a group of computer workers**. In: WORK: A Journal of Prevention, Assessment & Rehabilitation. 2011 ; Vol. 39, No. 4. pp. 357-367.

Jacinto, Celeste ; Nunes, Isabel L. / **Gestão Integrada: uma boa estratégia para todos?**. In: Organizações e Trabalho. 2011 ; Vol. 33-34, No. NA. pp. 51-58.

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Nunes, Isabel L. ; DEE Group Author. / **Ergonomic Risk Assessment Methodologies for Work-Related Musculoskeletal Disorders: A Patent Overview**. In: Recent Patents on Biomedical Engineering. 2009 ; Vol. 2, No. 2. pp. 121-132.

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Nunes, Isabel L. / **Ergonomics & Usability - key factors in knowledge society**. In: Enterprise and Work innovation Studies. 2006 ; Vol. 2, No. NA. pp. 87-94.

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Research › Chapter

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Simões-Marques, Mário ; Nunes, Isabel L. / **Contributions to the design of knowledge-based development tools for intelligent systems**. Ergonomics in Design: Methods and Techniques. CRC Press, 2016. pp. 387-403

Nunes, Isabel L. / **A Fuzzy multicriteria methodology to manage priorities and resource assignment in critical situations**. Humanitarian & Relief logistics: Research issues, case studies and future trends. editor / V. Zeimpekis ; S. Ichoua ; I. Minis. New York : Springer, 2013. pp. 129-153 (Operations Research/ Computer Science Interfaces Series).

Coelho, Denis A. ; Nunes, Isabel L. / **Ergonomic design and evaluation of surveillance systems**. Effective Surveillance for Homeland Security: Balancing Technology and Social Issues. Florida : CRC Press, 2013. pp. 257-277 (Multimedia Computing, Communication and Intelligence).

Nunes, Isabel L. / **Applications of Fuzzy Logic in Risk Assessment. The RA_X case**. Fuzzy Inference System – Theory and Applications. editor / Mohammad Fazle Azeem. Janeza Trdine 9, 51000 Rijeka, Croatia : InTech, 2012. pp. 22-40

Nunes, Isabel L. / **Usability of Interfaces**. Ergonomics - A Systems Approach. editor / Isabel L. Nunes. Janeza Trdine 9, 51000 Rijeka, Croatia : InTech, 2012. pp. 155-170

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Research › Conference contribution

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Flor, Raquel ; Gaspar, Jacqueline ; Fújão, Carlos et al. / **How Workers Perceive LAEVO Exoskeleton Use in Non-cyclic Tasks**. Advances in Human Factors and System Interactions - Proceedings of the AHFE 2021 Virtual Conference on Human Factors and Systems Interaction, 2021. editor / Isabel L. Nunes. Cham : Springer, 2021. pp. 147-154 (Lecture Notes in Networks and Systems).

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Simões-Marques, Mário ; Teodoro, M. Filomena ; Calhamonas, Gabriel et al. / **Applying a variation of delphi method for knowledge elicitation in the context of an intelligent system design**. Advances in Human Factors and Systems Interaction - Proceedings of the AHFE 2019 International Conference on Human Factors and Systems Interaction. editor / Isabel L. Nunes. Springer Verlag, 2020. pp. 386-398 (Advances in Intelligent Systems and Computing).

Calle-Jimenez, Tania ; Tuttillo-Sanchez, Doris ; Sanchez-Gordon, Sandra et al. / **Improving usability with think aloud and focus group methods. A case study: an intelligent police patrolling system (i-PAT)**. Advances in Human Factors and Systems Interaction - Proceedings of the AHFE 2019 International Conference on Human Factors and Systems Interaction. editor / Isabel L. Nunes. Cham : Springer Verlag, 2020. pp. 361-373 (Advances in Intelligent Systems and Computing).

Acosta-Vargas, Patricia ; Salvador-Ullauri, Luis ; Jadán-Guerrero, Janio et al. / **Accessibility assessment in mobile applications for android**. Advances in Human Factors and Systems Interaction - Proceedings of the AHFE 2019 International Conference on Human Factors and Systems Interaction. editor / Isabel L. Nunes. Cham : Springer Verlag, 2020. pp. 279-288 (Advances in Intelligent Systems and Computing).

Zarte, Maximilian ; Pechmann, Agnes ; Nunes, Isabel L. / **System-of-systems approach for sustainable production planning and controlling in manufacturing companies**. Advances in Human Factors and Systems Interaction - Proceedings of the AHFE 2019 International Conference on Human Factors and Systems Interaction. editor / Isabel L. Nunes. Cham : Springer Verlag, 2020. pp. 413-421 (Advances in Intelligent Systems and Computing).

Simões-Marques, Mário ; Mendonça, Pedro ; Figueiredo, Diogo et al. / **Disaster management support system prototype design evolution based on UX testing**. Advances in Human Factors and Systems Interaction - Proceedings of the AHFE 2019 International Conference on Human Factors and Systems Interaction. editor / Isabel L. Nunes. Cham : Springer, 2020. pp. 374-385 (Advances in Intelligent Systems and Computing).

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Jadán-Guerrero, Janio ; Sanchez-Gordon, Sandra ; Acosta-Vargas, Patricia et al. / **Interactive Storytelling Books for Fostering Inclusion of Children with Special Needs**. Advances in Human Factors and Systems Interaction - Proceedings of the AHFE 2020 Virtual Conference on Human Factors and Systems Interaction. editor / Isabel L. Nunes. Cham : Springer, 2020. pp. 222-228 (Advances in Intelligent Systems and Computing).

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Simões-Marques, Mário J. ; Correia, Anacleto ; Nunes, Isabel L. / **Design of Disaster Management Intelligent System – A Review of the Applied UCD Methods.** Advances in Human Factors and Systems Interaction - Proceedings of the AHFE 2020 Virtual Conference on Human Factors and Systems Interaction. editor / Isabel L. Nunes. Cham : Springer, 2020. pp. 93-99 (Advances in Intelligent Systems and Computing).

Sanchez-Gordon, Sandra ; Jadán-Guerrero, Janio ; Arias-Flores, Hugo et al. / **Model for Generation of Profiles for Persons with Disabilities in e-Learning Environments.** Advances in Human Factors and Systems Interaction - Proceedings of the AHFE 2020 Virtual Conference on Human Factors and Systems Interaction. editor / Isabel L. Nunes. Cham : Springer, 2020. pp. 242-249 (Advances in Intelligent Systems and Computing).

Acosta-Vargas, Patricia ; Serrano-Costales, Luis ; Salvador-Ullauri, Luis et al. / **Toward Accessible Mobile Application Development for Users with Low Vision.** Advances in Human Factors and Systems Interaction - Proceedings of the AHFE 2020 Virtual Conference on Human Factors and Systems Interaction. editor / Isabel L. Nunes. Springer, 2020. pp. 236-241 (Advances in Intelligent Systems and Computing).

Teodoro, M. Filomena ; Marques, Mário J. Simões ; Nunes, Isabel et al. / **Using mds to compute the contribution of the experts in a delphi forecast associated to a naval operation's dss.** Computational Science and Its Applications – ICCSA 2020 - 20th International Conference, Proceedings. editor / Osvaldo Gervasi ; Beniamino Murgante ; Sanjay Misra ; Chiara Garau ; Ivan Blečić ; David Taniar ; Bernady O. Apduhan ; Ana Maria A.C. Rocha ; Eufemia Tarantino ; Carmelo Maria Torre ; Yeliz Karaca. Cham : Springer, 2020. pp. 446-454 (Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)).

Marques, Mário ; Elvas, Filipe ; Nunes, Isabel L. et al. / **Augmented Reality in the Context of Naval Operations.** Human Systems Engineering and Design - Proceedings of the 1st International Conference on Human Systems Engineering and Design IHSED2018: Future Trends and Applications. editor / T. Ahrum ; R. Tair ; W. Karwowski . Cham : Springer Verlag, 2019. pp. 307-313 (Advances in Intelligent Systems and Computing).

Zarte, Maximilian ; Pechmann, Agnes ; Nunes, Isabel L. / **Indicators and goals for sustainable production planning and controlling from an ergonomic perspective.** Advances in Human Factors and Systems Interaction - Proceedings of the AHFE 2018 International Conference on Human Factors and Systems Interaction, 2018. editor / Isabel L. Nunes. Vol. 781 Springer Verlag, 2019. pp. 363-373 (Advances in Intelligent Systems and Computing).

Zarte, Maximilian ; Pechmann, Agnes ; Nunes, Isabel L. / **Design of a platform for sustainable production planning and controlling from a user centered perspective.** Advances in Human Factors and Systems Interaction - Proceedings of the AHFE 2018 International Conference on Human Factors and Systems Interaction, 2018. editor / Isabel L. Nunes. Vol. 781 Springer Verlag, 2019. pp. 396-407 (Advances in Intelligent Systems and Computing).

Calle-Jimenez, Tania ; Sanchez-Gordon, Sandra ; Rybarczyk, Yves et al. / **Analysis and improvement of the web accessibility of a tele-rehabilitation platform for hip arthroplasty patients**. Advances in Human Factors and Systems Interaction - Proceedings of the AHFE 2018 International Conference on Human Factors and Systems Interaction, 2018. editor / Isabel L. Nunes. Springer Verlag, 2019. pp. 233-245 (Advances in Intelligent Systems and Computing).

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Rybarczyk, Yves ; Deters, Jan Kleine ; Gonzalo, Arián Aladro et al. / **Recognition of Physiotherapeutic Exercises Through DTW and Low-Cost Vision-Based Motion Capture**. Advances in Human Factors and Systems Interaction - Proceedings of the AHFE 2017 International Conference on Human Factors and Systems Interaction, 2017. editor / I. Nunes. Cham : Springer, 2018. pp. 348-360 (Advances in Intelligent Systems and Computing).

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