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Relevant Data Science and Statistics Publications

- **Hu, S**, Murphy, TB & O'Hagan, A (2021), "mvClaim: An R Package for Multivariate General Insurance Claims Severity Modelling", *Annals of Actuarial Science*, `https://doi.org/10.1017/S1748499521000099`.

- **Hu, S**, O'Hagan, A, Sweeney, J & Ghahramani, M (2020), "A Spatial Machine Learning Model for Analyzing Customers' Lapse Behaviour in Life Insurance", *Annals of Actuarial Science*, `https://doi.org/10.1017/S1748499520000329`.

- **Hu, S** & O'Hagan, A (2020), "What Are You Grouping For: Investigating How Cluster Analysis with Copulas Can Improve Insurance Claims Forecasting", *The Actuary*, July 2020, `https://www.theactuary.com/features/2020/07/08/insurance-claims-forecasting-cluster-analysis`.

- **Hu, S** & O'Hagan, A (2019), "Copula Averaging for Tail Dependence in General Insurance Claims Data", *Working paper*, `https://arxiv.org/abs/2103.10912`.

- **Hu, S**, Murphy, TB & O'Hagan, A (2019), "Bivariate Gamma Mixture of Experts Models for Joint Claims Modeling", *Statistical Modelling* (Under revision), `https://arxiv.org/abs/1904.04699`.

- **Hu, S**, O'Hagan, A & Murphy, TB (2018), "Motor Insurance Claims Modeling with Factor Collapsing and Bayesian Model Averaging", *Stat*, `https://doi.org/10.1002/sta4.180`.

- Ratmann, O, Camacho, A, **Hu, S** & Colijn C (2018), "Informed Choices: How to Calibrate ABC with Hypothesis Testing" in Sisson SA, Fan Y & Beaumont MA (eds.), *Handbook of Approximate Bayesian Computation*, Chapman & Hall/CRC, `https://doi.org/10.1201/9781315117195`.

- Bastawrous, A, et al (2016), "Clinical Validation of Smartphone Based Adapter: Peek Retina for Optic Disc Imaging in Kenya", *JAMA Ophthalmology*, `https://dx.doi.org/10.1001%2Fjamaophthalmol.2015.4625`.

- **Hu, S**, Smith, N, Saunders. L & Crabb, D (2015), "Patterns of Binocular Visual Field Loss Derived From Large-Scale Patient Data From Glaucoma Clinics", *Ophthalmology*, `https://doi.org/10.1016/j.ophtha.2015.08.005`.

Relevant Data Science Packages

- **Hu, S**, Murphy TB & O'Hagan, A (2019), R package: *"mvClaim": multivariate general insurance claims modelling*. Available at github.com/senhu/mvClaim

- **Hu, S**, O'Hagan, A & Murphy, TB (2017), R package: *"FCBMA": factor collapsing with Bayesian model averaging for regression models*. Available at Available at github.com/senhu/FCBMA

- Ratmann, O, Camacho, A, **Hu, S** & Colijn, C (2015), R package: *"abc.star": Calibration procedures for accurate ABC*, available at github.com/olli0601/abc.star

Conference Talks

- GIRO Conference, Institute and Faculty of Actuaries, Birmingham, UK, October 2018.
- 33rd International Workshop on Statistical Modelling 2018, University of Bristol, Bristol, July 2018.
- 31st International Congress of Actuaries, International Actuarial Association, Berlin, June 2018.
- Non-Life Pricing Seminar: Topical Actuarial Perspectives, Society of Actuaries in Ireland, Dublin, March 2018.
- GIRO Conference, Institute and Faculty of Actuaries, Edinburgh, UK, October 2017.
- 52nd Actuarial Research Conference, Georgia State University, Atlanta, USA, July 2017.
- 5th R in Insurance Conference, ENSAE ParisTech, Paris, France, June 2017.
- 39th Research Student Conference in Probability and Statistics, University College Dublin, Ireland, June 2016.