Kim Bente

Data Science PhD student, School of Computer Science, The University of Sydney

- Passionate about probabilistic machine learning for climate research in Antarctica because "what happens in the poles, doesn't stay in the poles".

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Education

07/2021 - current

Data Science PhD student, School of Computer Science, The University of Sydney, AUS
`Uncertainty quantification and communication in environmental modelling'
- Supervised by Prof Fabio Ramos, Dr Roman Marchant and Prof Judy Kay
- Member of the Data Analytics for Resources and Environments ARC Training Centre
- PhD program coursework specialised in **Bayesian Computational Statistics**

07/2019 - 07/2020

Master of Data Science, The University of Sydney, AUS
Completed with High Distinction (WAM 88), Master's Thesis `New Perspectives on the Validation of a Mobile App for Dietary Assessment using Data Mining'

02/2019 - 06/2019

Graduate Certificate in Data Science, The University of Sydney, AUS
Completed with High Distinction (WAM 91)

09/2013 - 09/2016

Bachelor in Management & Technology, Technical University of Munich, DE
Bachelor of Science with specialisations in Chemical Engineering and Finance

Publications

2022

Bente, K., Kay, J., Marchant, R. (2022). Probabilistic Machine Learning in Polar Earth and Climate Science: A Review of Applications and Opportunities. In *AAAI 2022 Fall Symposium: The Role of AI in Responding to Climate Challenges*. Arlington, USA.

10/2022

Bente, K.B., Nassif, E., Davies, A., Wellard-Cole, L., Jung, J., Kay, J., ... & Allman-Farinelli, M. (2022). The Contribution of Nutrients of Concern to the Diets of 18-to-30-Year-Old Australians from Food Prepared Outside Home Differs by Food Outlet Types: The MYMeals Cross-Sectional Study. *Nutrients*, 14(18), 3751.

05/2021

Wellard-Cole, L., Davies, A., Chen, J., Jung, J., **Bente, K. B.**, Kay, J., ... & Allman-Farinelli, M. (2021). The Contribution of Foods Prepared Outside the Home to the Diets of 18- to 30-Year-Old Australians: The MYMeals Study. *Nutrients*, 13(6), 1761.

Conferences & workshops

11/2022

AAAI 2022 Fall Symposium: The Role of AI in Responding to Climate Challenges, USA
Accepted paper (see publications) and presentation of contributed work at symposium

09/2022

Information Resilience PhD School 2022, The University of Queensland, AUS
Awarded travel grant; awarded first prize in data literacy competition; 3MT presentation

Awards

07/2022

PhD scholarship and stipend: The Australian Government Research Training Program (RTP) International Stipend & Tuition Fee offset Scholarship

07/2022

PhD top-up scholarship: The Australian Research Council's Industrial Transformation Training Centre in Data Analytics for Resources and Environments (DARE), grant IC190100031

06/2021	**School of Computer Science Postgraduate Coursework High Honour Roll** awarded for Master's thesis and also coursework achievements for Data Analysis in the Social Sciences
12/2019 - 02/2020	**Faculty of Engineering Summer Research Scholarship**, The University of Sydney, AUS `Data Mining Dietary Patterns`' supervised by Prof Kay, A/Prof Yacef, and A/Prof Koprinska

Teaching

08/2022 - 12/2022	**Tutor for Human-in-the-Loop Data Analytics** [DATA3406], School of Computer Science Undergraduate level tutoring, Semester 2 2022
02/2021 - 03/2021	**Tutor for Data Analysis in the Social Sciences** [DATA5207], United States Study Centre Postgraduate level tutoring, Intensive February 2021
08/2019 - 12/2019	**Tutor for Algorithms** [COMP9007], School of Computer Science Postgraduate level tutoring, Semester 2 2019

Employment experience

12/2020 - 11/2021	**Administrative Assistant**, Faculty of Engineering, The University of Sydney, AUS Data analysis of university data and systems to support internal decision-making
07/2020 - 07/2021	**Research Associate**, School of Computer Science, The University of Sydney, AUS Research focus on **Human-centred technology applied to nutrition and education** - Large-scale interdisciplinary research project with Nutrition/Dietetics researchers - Data analysis (R), data visualisation, clustering, classification models - Education data analytics, building an Open learner model for DATA3406
10/2017 - 04/2018	**Global Business Development & Customer Analytics for SAAS startup** FOURSOURCE Group GmbH (multinational tech startup in apparel/textile sourcing), Berlin, DE - **Customer analytics, Business Intelligence, development of churn risk model**
01/2016 - 10/2016	**Junior Innovation Consultant**, projects in logistics and telecommunications HYVE Innovation Community GmbH, HYVE AG (innovation consulting), Munich, DE
10/2015 - 01/2016	**Placement in Innovation Consulting & Sales**, project for Vodafone (telecommunications) HYVE Innovation Community GmbH, HYVE AG (innovation consulting), Munich, DE
04/2014 - 10/2014	**Working student in Strategic Management Consulting**, market research in media sector Goetzpartners Holding AG (strategy, M&A and transformation advisory), Munich, DE
05/2013 - 07/2013	**Internship in Research & Development and International Marketing** for consumer goods Schwarzkopf, Henkel AG & Co. KGaA (chemical and consumer goods), Hamburg, DE
09/2012 - 12/2012	**Internship in Product Management** for consumer goods Kneipp GmbH, Paul Hartmann AG (cosmetics and medicinal products), Würzburg, DE

Technical skills & languages

Technical skills	Advanced **R** and **Python** skills, competent in Git and Docker
	Foundational SQL, Java, Javascript, HTML and CSS skills
Languages	English (business fluent, TOEFL 113 out of 120), German (native)

Community engagement

02/2022 - present	**Co-founder and VP** of the Postgraduate Research in Engineering **Student Society** (PRESS)
09/2021 - present	**HDR student representative**, Faculty of Engineering, The University of Sydney

Sydney, 31 January 2023,

Kim Bente