

Brian A. Hur
Seattle, WA
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Education:

PhD Candidate, Natural Language Processing and Veterinary Epidemiology, Expected 3/2022 – University of Melbourne, Australia

Doctor of Veterinary Medicine, 5/2011 - Washington State University College of Veterinary Medicine, Pullman, WA

Bachelor of Science, 12/2008 - Washington State University, Pullman, WA

Conference Activity:

Domain Adaptation and Instance Selection for Disease Syndrome Classification over Veterinary Clinical Notes

BioNLP @ Association for Computational Linguistics, Seattle, Washington, USA – July 2020

State of the art diagnostic approaches in veterinary medicine – Better use of data to drive decisions

Australian National Antimicrobial Resistance Forum, University of Queensland, Brisbane, Australia - November 2019

Using Natural Language Processing and VetCompass to Understand Antimicrobial Usage Patterns in Australia

Talbot Symposium for Veterinary Informatics @ Fetch360, Kansas City, Missouri, USA - August 2019

Australian New Zealand Veterinary College Science Week, Gold Coast, Queensland, Australia - July 2019

Australian Veterinary Antimicrobial Stewardship Conference, Gold Coast, Queensland, Australia - November 2018

Natural Language Processing of Veterinary Patient Discharge Summaries

American Veterinary Medical Association Conference, San Diego, California, USA - July 2012

Contrasting n-gram matching and ClinicalBERT to enhance medical concept normalization

OHNLP Workshop @ Association for Medical Informatics Association, Washington DC, USA - November 2019

Using Natural Language Processing and VetCompass to Understand Antimicrobial Usage Patterns in Australia

Computing Information Systems Doctoral Colloquium, Melbourne, Australia, USA - September 2019 - **Best Poster Award**

Journal Papers

“Describing the Antimicrobial Usage Patterns of Companion Animal Veterinary Practices; Free Text Analysis of More than 4.4 Million Consultation Records.” *PLOS ONE* 15, no. 3 (2020): 1–15.

“Using Natural Language Processing and VetCompass to Understand Antimicrobial Usage Patterns in Australia.” *Australian Veterinary Journal* 97, no. 8 (2019): 298–300.

Technical Proficiencies:

Python / Tensorflow / Pytorch

Tensorflow / Pytorch

NLP / Web Search / Text Analytics

Data Analysis

Statistics

Tableau

Google Cloud/AWS/Azure

SQL / NoSQL

Medical Ontologies

Professional Experiences:

PhD Candidate, University of Melbourne, VIC, March 2018 to present

Thesis Title: Using Natural Language Processing and Machine Learning to Understand Antimicrobial Usage Patterns in Australia.

Supervisors: Prof. Timothy Baldwin, Prof. James Gilkerson, Prof. Karin Verspoor, and Dr. Laura Hardefeldt

Teaching Experience: Text and Web Analytics (Autumn, 2019) and Foundations of Computing (Summer, 2019)

IT Consultant, 2005 to present:

Provided IT consulting services on a variety of projects from clients ranging from small businesses to Fortune 500 companies while obtaining a veterinary degree, launching early-stage start-ups and performing my PhD candidacy.

Key Projects:**University of Sydney, Sydney, Australia (current)**

Data consultant for VetCompass Australia in which I help with the design of the data warehousing and efforts for the refinement of data pipelines between hundreds of clinics across the country to provide useful data for researchers.

Microsoft, Redmond, Washington

Technical Project Manager in the redesign of XBOX Live's Active Directory environment and identity management infrastructure using federated services to allow site content to be more securely modified by vendors across the world.

Boeing, Everett, Washington

Systems Analyst in the collection of requirements, development and configuration of the load balancing capability of a custom web-based application used for the 787 projects.

Hasbro, Bellevue, Washington

Operations Engineer in the implementation of an identity management solution to allow users to sign onto a single site and be securely authenticated for multiple applications, online games, and purchases for Hasbro technologies.

Premera, Seattle, Washington

Technical Project Manager in Migration of over 100 internal applications to virtual servers while ensuring application architecture still maintained HIPAA compliance.

Love That Pet Group, Chief Information Officer, Sydney, New South Wales, Australia, 2016 to 2017

Built and led a team to develop and maintain the technology for a portfolio of pet technology veterinary services including and integrated solution for 5 veterinary hospitals, an online community with over 500k monthly visitors and an ecommerce platform.

VetPronto (YC W15), Cofounder, San Francisco, California, USA, 2014 to 2015

Created and ran an on-demand home veterinary care service with custom built mobile apps for medical records and appointment booking to create the largest home veterinary service provider until acquired by Vetted PetCare. Participated in YCombinator Winter 2015 Batch and raised over \$1.2 Million in funding.

Animal Emergency Hospital of Redmond, Redmond, Washington, USA, 2011 to 2013

Handled all veterinary surgical or medical emergencies that walk in or call during the shift I am covering and perform the necessary diagnostics and treatments.

Dachser GmbH, Kempten, Systems Engineer, Germany, 2002 to 2003

Designed a pathway to make their web servers scalable through network load balancing and implemented active directory on their global logistics and transportation infrastructure.

Compaq/Microsoft, Redmond, Washington, USA, 1999 to 2001

As a Microsoft Vendor through Compaq/HP I worked on the of implementation, support, and design of load balanced web servers and the initial release and roll out of Active Directory.

Associations:

Association for Computational Linguistics

Association of Veterinary Informatics

Volunteer:

Veterinary Machine Learning Reading Group Chair, Online, 2020-present

Association for Veterinary Informatics Education Committee, Online, 2019-present

Natural Language Processing Reading Group Chair, University of Melbourne, 2018-2020

Cairns Turtle Rehabilitation Centre, Veterinarian, Cairns, Australia, 2015 to 2016

Woodland Park Zoo, Veterinarian, Seattle, Washington 2011 to 2012