

James Benn

Technical Writer & Researcher



Personal

James Benn
nationality: New Zealand
1987

Soft skills

A curious and patient listener
• Very strong written communication and presentation skills • A diplomat who leads by giving people what they need to perform.

Professional Interests

I'm a technical writer and research scientist working in mathematics and statistics. I'm interested in statistics and mathematics for both civil, and software, engineering, and producing and maintaining technical documentation of all kinds.

Areas of specialization

Mathematics • Statistics for Medical Shape & Image Analysis • SP and Quality Control for Manufacturing • Software for Civil Engineering Applications
• Technical Writing • Research • Teaching • Supervision

@jbenn2@alumni.nd.edu

Personal Website

Iksiri

RESUMÉ

2020-now	Research Scientist INRIA · France PhD student supervision, manuscript and presentation supervision, independent researcher in statistics for non-linear data.	
2019-2020	Senior Claims Analyst MINISTRY FOR PRIMARY INDUSTRIES · New Zealand Business performance analyst, and legal memoranda draftsman.	
2018	Visiting Researcher BU-ALI-SINA UNIVERSITY & GOETHE UNIVERSITY · Iran & Germany Independent researcher in the geometry and analysis of hydrodynamics.	
2018	Construction & Maintenance Quality Control Analyst HIGGINS CONSTRUCTION · New Zealand Maintenance KPI development, Statistical Process Control automation and road surface quality protocol automation.	
2016-2017	Postdoctoral Researcher and Lecturer MASSEY UNIVERSITY · New Zealand Graduate and Undergraduate course instructor, independent researcher.	
2015-2016	Statistical Consultant MID-CENTRAL DISTRICT HEALTH BOARD · New Zealand Emergency department patient-flow modeling, and resource allocation.	

DEGREES

2015	PhD Mathematics UNIVERSITY OF NOTRE DAME · IN, USA	
2012	M.A. Mathematics UNIVERSITY OF NOTRE DAME · IN, USA	
2009	BlnfSc Mathematics and Statistics MASSEY UNIVERSITY · New Zealand	

PRESENTATIONS

May, 2024	"Right-Invariant Geometry of Lie Groups", at: <i>Geometric Sciences in Action</i> CIRM, Marseille, France.
Mar 2023	"Conjugate Points on $\mathcal{D}_\mu(S^2)$; but what are they really?", at: <i>Maynooth University Ireland</i> .
Nov 2021	"The Measurement and Analysis of Shapes", at: <i>Universite Paris 1 (Pantheon Sorbonne), SAMM Seminar</i> Paris, France

PROGRAMMING

L ^A T _E X	<div><div></div></div>
python	<div><div></div></div>
R	<div><div></div></div>

RECENT PUBLICATIONS

2024	with S. Marsland, <i>Delta-type 1-Forms and Knots as Weak Coadjoint Orbits</i> (in preparation)
2024	with J. Harrison, <i>Improving Neural Network Surface Processing with Principal Curvatures</i>
2023	with M. Pederson, <i>Principal Subbundles for Dimension Reduction</i>
2022	with S. Marsland, <i>A Setting for the Measurement and Analysis of Shape</i>
2021	<i>Conjugate Points on $\mathcal{D}_\mu(S^2)$</i>