DR. GARETH KENNEDY

SUMMARY

Data scientist with over a decade's experience in mathematical modelling, computational physics, data mining, statistical analysis and high-performance computing.

Effective communication skills gained from experience with technical, C-suite and non-expert audiences while working in Australia, Spain and China.

SKILLS

Software: extensive experience with R, Python, C, Fortran, SQL and Unix based scripting languages

Computing: significant experience using AWS cloud computing, OpenMP/MPI on clusters and CUDA with C on GPU clusters.

Languages: Native English; elemental Spanish, Chinese and German

CONTACT

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https://github.com/garethkennedy

For more details see:

www.garethkennedy.net

EXPERIENCE

Data Scientist: MCON Group, Shanghai, China: 10/2016 – present
- Applying statistical and predictive analytics to automotive services, parts and workshop price data to deliver insights to clients
- Identify target customer groups using machine learning
- Designed stratified control groups for Chinese market and AB testing
- Developed IoT project concepts using AWS ecosystem
- Provided training to the business intelligence unit at MCON

Freelance Statistical Consultant: 10/2017 – present
- Company trading in Australia
- Applying Bayesian statistical techniques to electrochemistry data

Research Fellow: University of Melbourne: 5/2015 – 6/2016
- Development of the Python layer for the underworld geophysics software (https://github.com/underworldcode/underworld2)

Research Fellow: NAOC, CAS, Beijing: 7/2012 – 1/2015
- Development of GPU code in C to run complex mathematical models of the galactic centre which include star and gas dynamics

Researcher: Monash University, Melbourne: 1/2011 – 5/2012
- Developed the Monash Electrochemistry Simulator (MECSim) software package (http://www.garethkennedy.net/MECSim.html)

Researcher: Universitat de Barcelona: 12/2008 – 12/2010
- Built and optimised a parallel N-body code using Fortran with OpenMP for an 8 node CPU cluster to model the galactic centre

EDUCATION

Doctor of Philosophy in Astrophysics (2008): Monash University
- Thesis title: "Problems in stellar and planetary dynamics"

Bachelor of Science Honours (2001): Monash University
- Awarded Astrophysics prize for the highest grade in the year
- Undergraduate majors in Astrophysics and Applied Mathematics

ACHIEVEMENTS

TEDx Beijing (4/2015) "Chaos. Order. Beauty." (https://youtu.be/MzFHPyURIQw)
Communication of complex ideas to technical, general and public audiences in China, Germany, Spain, Kazakhstan, U.K., and Australia.
Lecturing and tutoring at Monash (science and engineering) 2001 – 2007.
Politics: Campaigned for the Victoria state election politics in 2002
Publications: written and enabled many scientific peer-review papers: http://garethkennedy.net/Publications.html