

CODY GRIFFITH

Birkenstraße 123, Düsseldorf, 40233, Germany Cody.Griffith94@gmail.com LinkedIn

As a mathematician, I have had exposure to industrial algorithm and UI design, data science towards social impact, and contributed to the modelling of the dynamics of oceanic currents. My goal is to continue to diversify my knowledge and make an impact on the world around us.

EXPERIENCE

DEC. 2018 TO AUG 2021

RESEARCH SCIENTIST, 908 DEVICES INC.

- Automated intact protein characterization via deconvolution, relative identification, and quantization with CE-MS data in python and C++
- Managed the above tool for both internal and external software deployment
- Maintained and added significant features to existing Matlab/embedded software
- Reported sample analyses to customers and worked together with lab technicians and chemists to design and run experiments
- Formed large scale data analyses on manufacturing and unit exit test data

MAY 2018 TO SEPT 2018

RESEARCH SCIENTIST, DATA SCIENCE FOR SOCIAL GOOD

- Led development of a data analysis tool to bring together multiple data streams via R and make statistical inference
- Collaborated with stakeholders to ensure requirements were met
- Partnered with Microsoft to gain insight into algorithms and analysis avenues

EDUCATION

SEPT 2016 TO SEPT 2018

MSC. APPLIED MATHEMATICS, UNIVERSITY OF BRITISH COLUMBIA

Thesis: Non-Smooth Dynamics in the Stommel Model for Theromohaline Circulation **GPA**: 3.97 of 4.0

Relevant Coursework:

- Probability I, II & III
- Asymptotic Analysis

- Dynamic Systems
- Machine Learning

AUG 2012 TO MAY 2016

BSC. APPLIED MATHEMATICS, METROPOLITAN STATE UNIVERSITY OF DENVER

GPA: 3.67 of 4.0, Provost's Honor Roll -Spring 2015

Relevant Coursework:

- Probability Theory
- Numerical Analysis I & II
- Stochastic Processes

- Statistical Theory
- Chaos and Nonlinear Dynamics
- Statistical Methods

PUBLICATIONS

- Budd, C., **Griffith, C.**, & Kuske, R. (2021). *Dynamic tipping in the non-smooth Stommel-box model, with oscillatory forcing.* Physica D: Nonlinear Phenomena.
- **Griffith, C.**, Mathur, V., Lin, C. and Zhu, K. (2019). *Understanding Childhood Vulnerability in The City of Surrey.* [online] arXiv.org. Available at: https://arxiv.org/abs/1903.09639

ACADEMICS

Conference Talks

Exploration of Iterative Matrix	JMM 2016	
Transformations		
Probability Model of a Taxi Stand	MSU Denver 2015	
Dual Capacity Stochastic Queue	MAA 2015	

Collaborations

Failure Analysis of Mining Dump Trucks	SSR Mining 2017
Spatial & Temporal Analysis of Bear Creek	Groundwork Denver 2016

SKILLS

- Deep understanding of Algorithm Design
- 9+ years of Mathematical Analysis
- Excellent Collaborative & Interpersonal Skills
- Extensive use of Python & Matlab
- Intermediate use of R, C++ & Web technologies
- Well experienced in CI/CD frameworks

REFERENCES

Mr. Robert Green bgreen@908devices.com Principal Scientist Direct boss at 908 Devices Dr. Kevin Lin <u>kevin.lin@ubcs.ca</u> Director of DSSG at UBC Supervisor at DSSG Dr. Rachel Kuske
Rachel@math.gatech.edu
Chair of Mathematics
Master's thesis supervisor