Paul Gilmartin

Personal Information

Phone:	+44 7506587048
Personal Website:	www.paulgilmartin.co.uk
Email:	paul.gilmartin89@gmail.com
References:	Can be made available upon request

Summary

Highly motivated software developer with 2 years of industry experience in Python and 4 years in academia as a mathematics research student. A keen problem solver with excellent analytical skills and a real passion for developing clean, elegant and reusable code.

Work Experience

2016 onwards — Software Engineer (Python)
J.P. Morgan

Python developer working on an in-house real-time trading and risk management system.

- Worked in an extremely high-paced and demanding environment (continuous deployment to production)
- Customer driven development - worked closely with the business on a daily basis to ensure that the code we built would satisfy their needs.
- Made large positive impact on many areas of the system, both independently and through inter-team collaboration.
- Strict agile practices - scrum, retrospective, JIRA.

2015-2016 — Graduate Teaching Assistant
University of Glasgow

Lectured and led a class of 150-200 first year mathematics students. Held individual office hours to work with students on a one-to-one basis. Responsible for both setting and marking end of term exams, as well as helping with various administrative duties.

2014 — Research Visitor
University of Washington

Visited the University of Washington to carry out original research with Prof. James Zhang, a world renowned expert in the field of non-commutative algebra.

Education

2012 - 2016 — Ph.D. in Mathematics, **University of Glasgow**
Thesis: *Connected Hopf algebras of finite GK-dimension*
Advisor: Prof. Ken Brown

2007 - 2012 — M.Sci. (First Class Hons.) in Mathematics, **University of Glasgow**

Personal Projects and Self Study

2018	Personal Wesbite *www.paulgilmartin.co.uk* A personal website, built primarily to explore some nice python external libraries, but also as a way to showcase some of my research work, photographs and paintings. The backend is built primarily using the Python, making heavy use of the Flask and SQLAlchemy libraries. In the front-end, I chose to use Jinja2 for dynamic HTML template generation and CSS-bootstrap for dynamic visuals.
2015	Coursera MOOC: *Fundamentals of Computing Science* An online course offered by Rice University, teaching the basics of Python and computer science in general. Completed 7/7 courses, each with distinction

Software Engineering and Programming Skills

Advanced knowledge	Python
Basic knowledge	Java, mysql, html, CSS, git
Soft skills	Well-versed in agile practices and the use of project management tools such as JIRA.

Publications

2018	*A note on the order of the antipode of a pointed Hopf algebra* Journal: To be published. Accepted for publication in *Communications in Algebra* Preprrint: https://arxiv.org/abs/1611.03480
2016	*Connected (graded) Hopf algebras* Coauthors: Ken Brown and James Zhang Journal: To be published. Accepted for publication in *Transactions of the American Mathematical Society* Preprrint: https://arxiv.org/abs/1601.06687
2016	*Quantum homogeneous spaces of connected Hopf algebras* Coauthors: Ken Brown Journal: *Journal of Algebra, Volume 454, 15 May 2016, Pages 400-432*
2014	*Hopf algebras under finiteness conditions* Coauthors: Ken Brown Journal: *Palestine Journal of Mathematics, Vol. 3(Spec 1) (2014), 356–365*

Awards

2012 | *Carnegie-Caledonian PhD Scholarship*
The Carnegie PhD Scholarship scheme supports a limited number of graduates, with first class Honours undergraduate degrees from a Scottish university, who wish to pursue three years of postgraduate research leading to a PhD at a university in Scotland.

2012 | *J. R Macaulay Memorial Prize/ Weiglhofer Prize*
Most distinguished student in mathematics/ Best undergraduate dissertation.

2011 | *Dougal Prize*
Most distinguished student in mathematics/ Best undergraduate dissertation.

2010 | *Cunninghame Prize*
Most distinguished student in adv. hons. class of mathematics.

2009 | *Michael Faraday Medal*
Most distinguished student in Physics.

2008 | *Cleland Medal/ Joseph Black Medal*
Most distinguished student in Physics/ Chemistry.