

# John Mathews, Ph.D, MEng, ACA

*Accountant · Data Analyst · Digital Currencies Specialist*

## Personal Details

Location: London, UK  
Email: [mthwsjc@gmail.com](mailto:mthwsjc@gmail.com)  
British passport holder

## Online

Blog: [johnmathews.eu](http://johnmathews.eu)  
LinkedIn: [/in/johnmathews1](https://www.linkedin.com/in/johnmathews1)

## Languages

English: Native  
German: Intermediate  
Spanish: Beginner

## Programming and Scripting Languages, Packages

Python, UNIX, R, SQL, ACL, MATLAB, Erlang, LaTeX, Pandas, SAS

## Summary

John is seeking to establish himself as a digital ledger (cryptographic blockchain) specialist, by utilizing his engineering and accountancy skills and experiences. He is a chartered accountant, an engineering PhD and a hacker.

His 3 years' experience in the banking sector has increased his finance and business expertise. He can excel while working in corporate or academic environments. He learnt how to research, analyse and communicate whilst completing an Engineering PhD in Vienna, Austria.

He is resilient, adaptable and ambitious. Areas of particular interest include Digital Ledger Technology with a focus on how to increase social mobility, offer services to the un-banked and remove unfair competitive advantages.

## Employment

01.2016 – Present

PwC, Data Assurance, London

Senior Associate

I plan, execute and report the transfer, transformation and analysis of large financial datasets to support an independent opinion over published financial accounts. Data sets include financial journals (ledgers) across complex corporate structures, credit books (loans, mortgages), trading commission (revenue) and expenses records.

This requires learning about a client's operating environment and understanding their business processes. Interpersonal skills and rapport building are required to work effectively with clients to transfer and examine data outside their organisation.

04.2014 – 12.2015

PwC, Risk Assurance, London

Associate

Testing of automated business controls including merchant point-of-sale systems and the Internal Audit function at a global payments company.

04.2010 – 10.2013

PARDEM Research Network, Vienna

Researcher

Cutting-edge investigation into the behaviour of granular materials in increased gravities using a complex experimental set-up I designed and implemented. The physical experimental model was validated using a computational model I wrote and tested. I developed extensive problem-solving and research skills whilst meeting complex goals in a foreign and stressful environment. Collaboration and technical communication skills were improved through regular international conferences and network events.

## Skills and Competencies

- Strategic business management.
- Data transfer, cleansing and analytics.
- Management Information design and review.
- Financial audit and reporting, including hedge accounting.
- Business appraisal and valuation.
- Numerical modeling of engineering processes incl. fluids, grains, weather.
- Data science components including machine learning, data visualisation and exploratory data analysis.
- Financial modeling of business processes incl. Revenue/Expenses, opportunity costs.
- Programming experience with a wide range of languages and software.
- Design, communication and review of research programmes.
  
- Business-minded and entrepreneurial.
- Reacts positively to change, achieving results by prioritising effectively.
- Enthusiastic problem solver and critical thinker.
- Tinkerer and hacker - e.g. I run a hackintosh, taught myself Python for data analysis, front-end web design to create a blog, Erlang to play with the AEternity testnet.
- Marathon runner.

## Publications

- Centrifugal Modelling of Granular Flows, Cabrera M, Mathews J. Wu, W., Eurofuge conference proceedings
- Model Tests of Silo Discharge in a Geotechnical Centrifuge, Mathews J. Wu, W., (2015) Powder Technology
- Investigation of Granular Flow Using Silo Centrifuge Models, Mathews J., (2013) Doctoral Thesis, Austrian National Library, Central Library of the University of Natural Resources and Life Sciences, Vienna
- Experimental Investigation of Flow and Segregation Behaviour of Bulk Solids in Silos Under High Gravity Conditions, Mathews J. et al., (2013) in Particle Based Methods III – Fundamentals and Applications, PARTICLES 2013, Stuttgart, Germany, 18-20 September 2013. International Centre for Numerical Methods in Engineering (CIMNE), 352 – 362

## Education

04.2017	Chartered Accountant – ACA	ICAEW
10.2013	Doctorate degree – PhD “Investigation of granular flow using silo centrifuge models”	Universität für Bodenkultur, Austria
06.2009	Master’s degree – MEng Civil and Environmental Engineering	University of Edinburgh, Scotland
06.2004	A-Levels Maths (A), Further Maths (B), Physics (A)	Shrewsbury Sixth Form College, England

## Awards

10.2009	The Lindsay Prize (University of Edinburgh) “Consistently demonstrating the most aptitude for practical work throughout the honours course.”
04.2009	The MWH Prize (University of Edinburgh) “The most sustainable design during the "Environmental Engineering Group Design Project 5" course.”
11.2005	Queen's Jubilee Scholarship Trust (Institute of Civil Engineers) Scholarship with summer internships.