

Lee Morton

Curriculum Vitae

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Experience

2015

Software Engineer, Renishaw.

Summary I produce software to support the Sprint scanning probe used in industrial CNC machines. Our software processes data from the probe and can be used for part verification or adaptive machining.

- Implemented customer specific software and proved out complex processes on customer sites.
- Made significant contributions to the development of new technologies and applications.
- Significantly improved the testing of our products and the culture of testing within our team
- Re-implemented several core algorithms to make them faster or more accurate.
- Data analysis
- Have proposed and implemented / shared practices to allow us to work more efficiently.

2011
2015

PhD, Glasgow Caledonian University.

Title Inertial Motion Capture for At-Home Rehabilitation

Summary This project covered the design testing and implementation of an inertial motion capture system to be used in at-home rehabilitation applications. My co-researchers were responsible for developing patient facing visualisations, I was responsible for designing, developing and testing all technological aspects of the motion capture system including:

- Radio network protocols (XBee and ANT)
- Embedded software (C, FreeRTOS)
- Desktop configuration and visualisation software (Java, Processing, Python)
- Calibration techniques
- Testing with an optical motion capture system (Mathematica)

2015

Algorithms: Analysis and Design, Part 1, *Stanford*, Online Course.

2015

Algorithms: Analysis and Design, Part 2, *Stanford*, Online Course.

2015

Parallel and Heterogeneous Programming, *Illinois, Urbana–Champaign*, Online Course.

2012

Machine Learning, *Stanford*, Online Course, (98.6%).

2008

2011

Research Associate, *Glasgow Caledonian University*.

Summary

- Specialising in human computer interaction in mobile computing applications
- Developing software for research projects
- Carrying out research activities
- Teaching including tutorials and lectures

Projects

- Monitoring physical activity patterns using accelerometers and GPS
- Location aware mobile games
- Supervision of interns sponsored by Orange Research
- Working with primary and secondary schools to develop an interactive guide to the 2014 Glasgow Commonwealth Games
- Custom application commissions from businesses

2008

2009

PGDip, Advanced Computing, *Glasgow Caledonian University*.

2008

Putting Java to Work, *Open University*.

2008

CCNA: Cisco Certified Network Associate, *Open University*.

2007

Object Oriented Programming with Java, *Open University*.

2007

Teacher of Mathematics, *Stratford Upon Avon High School*.

2008

2005

2007

Supply Teacher, *Direct Solutions*.

2004
2005

Postgraduate Certificate in Education, Warwick University.

1999
2003

MPhys, Physics, Oxford University.

Major Options Atoms, Lasers and Optics, Solid State Physics

Project Exploring the Feasibility of a Mechanical Amplifier

1999

Mearns Castle High School.

Sixth Year Studies Mathematics (A), Physics (A), Chemistry (A)

Scottish Highers Mathematics (A), Physics (A), Chemistry (A), Biology (A), English (A)

Research Interests

EXTRAGALACTIC ASTROPHYSICS

- Galaxy Evolution
- Spectral Synthesis Models
- Chemical Evolution of the Universe
- UV Astrophysics

OTHERS

- Astrostatistics

Languages

Portuguese Native

English Fluent

Certificate of Proficiency in English
University of Michigan

French Fluent

Diplôme Approfondi de Langue Française (DALF)
Centre International d'Études Pédagogiques

Spanish Basic Fluency

Good Understanding, Medium Speaking, Basic Writing

German Basic Fluency

Good Understanding, Medium Speaking, Basic Writing

Skills

Programming Python, R, SQL Databases, \LaTeX

Tools GitHub, PyCharm, BitBucket

Program Version Control and Program Repositories.

Other Skills Communication, Organization, Writing, Translation

References

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Professor

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Budapest - Hungary

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