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## Hayden Duncan Stainsby

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**Email:** hds@caffeineconcepts.com

**Date of birth:** 27 April, 1983

**Nationality:** Australian

## Curriculum Vitæ

### Experience

**Research Fellow, Universitat Autònoma de Barcelona, Spain — 2013-present**

New research in the area of computational number theory. This position also includes responsibility for teaching undergraduate level classes.

**Systems Developer & Administrator (part time), Titan Entertainment Group, UK — 2007-present**

Development of mobile and web applications and administration of web servers. During this position I shipped a number of digital comic and retail based iOS applications, including an app that made it to #3 on the free apps list. I developed app code and backend services for all apps.

**Mobile developer (freelance), Bravo Tango Bravo, Australia — 2008-2014**

Development of three iOS apps for different clients. I was able to offer fast turn arounds on apps with frequently changing requirements. As a one off project I also developed a mobile game.

**Assistant IT Manager, Titan Entertainment Group, UK — 2006-2007**

Management of a team of IT support personnel. The IT support team performed installation of PCs and services running MacOS, Linux and Windows operating systems. My role also included server development.

**IT Support, Titan Entertainment Group, UK — 2005-2006**

Assisting users with problems related to graphical design and office applications running on Mac and Windows platforms. Installation of desktop machines.

### Education

**Universitat Autònoma de Barcelona, Spain**

Ph.D. in Mathematics, 2010-2014. Thesis titled "Triangular bases of integral closures."

**Escoles Universitàries Gimbernat i Tomàs Cerda, Spain**

Masters in Multimedia Design, 2009-2010

**Universitat Autònoma de Barcelona, Spain**

Masters in Computational Science & Engineering, 2008-2010

**Monash University, Australia**

Bachelors of Digital Systems, 2002-2004

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## Publications

*Bauch, Jens-Dietrich; Nart, Enric; Stainsby, Hayden D.* “Complexity of OM factorizations of polynomials over local fields.” *LMS Journal of Computation and Mathematics*, 2013, pp. 139-171.

*Stainsby, Hayden; Taboada, Manel; Luque, Emilio.* “Agent-Based Simulation to Support Decision Making in Healthcare Management Planning.” *HEALTHINF*, 2010.

*Stainsby, Hayden; Taboada, Manel; Luque, Emilio.* “Towards an Agent-Based Simulation of Hospital Emergency Departments.” *IEEE International Conference on Services Computing, (SCC '09)*, 2009, pp. 536 – 539.

*Stainsby, Hayden; Muresano, Ronal; Fialho, Leonardo; González, Juan Carlos; Rexachs, Dolores; Luque, Emilio.* “Teaching Model for Computational Science and Engineering Programme.” *International Conference on Computer Science (ICCS '09)*, 2009, pp. 34-43.

## Participation in research groups

### Effective methods in arithmetic geometry (MTM2013-40680-P) — 2013-present

Department of Mathematics, Universitat Autònoma de Barcelona (Project leader: Enric Nart).

### Combinatoric methods in arithmetic geometry and algebraic geometry (MTM2009-10359) — 2010-2013

Department of Mathematics, Universitat Autònoma de Barcelona (Project leader: Enric Nart).

### High Performance Computation and its application in computational science & engineering (TIN2007-64974) — 2008-2010

“Simulation of hospital emergency departments.” Department of Computer Architecture and Operating Systems, Universitat Autònoma de Barcelona (Project leader: Emilio Luque).

## Languages

English (mother tongue), Spanish (fluent), Catalan (intermediate), German (basic).

## References

References available on request.