# SAMUEL GONSHAW

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in samgonshaw

□ sjg10

## PUBLICATIONS AND WORKS

- S. Gonshaw, M. Liebeck, and E.A. O'Brien (2016). "Unipotent class representatives for finite classical groups". In: J. of Group Theory (Ahead Of Print)
- S. Gonshaw (2014). "Computing Conjugacy Classes of Classical Groups Over Characteristic Two". MSci. Thesis. Imperial College London
- T. Coates, S. Gonshaw, A. Kasprzyk, and N. Naibjou (2014). "Mutations of Fake Weighted Projective Spaces". In: *Electr. J. Comb.* 21.4, P4.14

### **EDUCATION**

## Imperial College London

(Sep 2010-Jun 2014)

London, UK

- MSci. incorporating BSc. & ARCS  $1^{\rm st}$  Class (Hons.) Mathematics

Israel National Institute for Evaluation (2008)

Tel Aviv, Israel

• Israeli Standard Psychometric Test: 95<sup>th</sup>-98<sup>th</sup> percentile rank

Birkat Moshe Talmudic Seminary

(Aug 2007-Oct 2007)

Ma'ale Adummim, Israel

• Study and analysis of Jewish theology with emphasis on Talmudic texts.

King David High School

(2000-2007)

Manchester, UK

• A Level: Mathematics (A), Further Mathematics (A), Physics (A), Modern Hebrew (A) (2007) Computing (AS - A) (2006)

#### **EMPLOYMENT**

# **OCZ Storage Solutions**

Senior Firmware Engineer, San Jose, CA (Jan 2016-)

Senior Firmware Engineer, Oxford, UK (Aug 2015-Dec 2015)

Firmware Engineer, Oxford, UK (Sep 2014-Aug 2015)

Design of enterprise SSD products based on multiprocessor ASIC architecture.

Design of ASIC verification firmware for new IC design.

Development of new feature sets for the in-house Barefoot 3 SSD controller in an Agile workflow.

Support and debugging of previous products containing the Barefoot 3 controller.

Characterisation experiments on A19 NAND flash technology.

### Imperial College London

Research Assistant

(Jul 2012-Dec 2013, Jul 2014-Sep 2015)

Independent exploration of simple groups of Lie type in characteristic two with the group theory group.

Assisting the geometry group with computational package creation for the study of Fano varieties, locally in MAGMA and published in SAGE.

Multithreaded C development for theorem proving and aiding group research into weighted projective spaces.

## Mangahigh.com

Maths Author

(Nov 2010-Apr 2011)

Design of exercises for an online teaching environment for at Key Stages 1 through 4.

King David High School, Manchester

Examinations Invigilator (Apr 2010-June 2010)

Israeli Defence Forces

HR Coordinator (May 2009-Jan 2010) Infantry, Machine Gunner (Oct 2008-May 2009)

Lewis and Co. Solicitors, Oldham

General Office Assistant (Jun 2008- Sep 2008, Jul 2010)

Jerusalem Foundation, Jerusalem, Israel

Intern: Writer (Feb 2008-May 2008)

Livnot U'Lehibanot, Jerusalem, Israel

Painter/Decorator/Handyman (Oct 2007-Feb 2008)

**OTHER** EXPERIENCE

Oct 2013-Jun 2014: Tutoring mathematics undergraduates at Imperial College. Jan-May 2013: Maths Teaching Assistant at Westminster City Boys School in conjunction with the Imperial College London outreach centre.

Aug 2005: Technion Institute of Technology, Haifa, Israel, SciTech summer school participant, writing on "Software Testing in JUnit".

**PROGRAMMING C:** Multithreaded C for scientific computation. Embedded C and ARM ASM.

**Java:** Experience in development for desktop, server and Android.

Computer Vision: OpenCV development for Android applications. Mathematical: SAGE, MAGMA, GAP, MATLAB, Maple, LATEX typesetting.

Storage Development ATA protocol and analysis, proprietary bus logic analysis. Workflow Tools: SVN, Git, Mercurial, Agile (Scrum Open Developer Qualification).

Other: Python (Cython, numpy, matplotlib), J2ME, Haskell

AWARDS Mar 2014: ICHACK: Best E-learning application, most monetizable concept

> Sep 2010: Outstanding Soldier of 933rd Training Base Jan 2006: UK Mathematics Challenge, Gold Award

SKILLS

**Problem Solving:** A blend of background study, theory construction and planned experimentation form a mathematically founded approach to solutions.

Communication: Understanding of others views through my teaching techniques allows fluid receipt and sharing of ideas.

**Team Work:** Work as a councillor and in the military has instilled an understanding of appropriate team interaction.

Interpersonal: Skill in serving the needs of others: personal needs from experience as a camp councillor, and professional from work in HR.

Office: Data input, filing and organisation, report creation and secretarial work including phone manner.

Languages: Fluency in English and Modern Hebrew.

VOLUNTEER WORK

Imperial Undergraduate Mathematics Colloquium (2012-2013) Founder, organiser and speaker.

Imperial College Fellwanderers: (2011-2012) Committee member.

Scouting Movement: (2006-2007) Councillor at a local branch.

**Tutoring:** (2006-2007) Occasional tutoring of mathematics and Hebrew Studies to children aged 11-16 (KS3-KS4).

Bnei Akiva Youth Movement: (2005-2007) Councillor on camps and regular meets. Founded and ran a local branch of said movement.