

# CV - Luke Elliott

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Address Home: 9 Peacock Place, Bonnyrigg, Midlothian EH19 3RA  
Phone Home: 0131 663 4055 Mobile: 07531165688  
Email University: le27@st-andrews.ac.uk Personal: luke.elliott142857@gmail.com  
Website <https://le27.github.io/Luke-Elliott/>  
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## PhD

### ArXiv Papers

Paper	Coauthors
Automatic continuity, unique Polish topologies, and Zariski topologies on monoids and clones	J. Jonušas, Z. Mesyan, J. D. Mitchell, M. Morayne, Y. Péresse
Sufficient conditions for a group of homeomorphisms of the Cantor set to be two-generated	Collin Bleak, James Hyde
A Description of $\text{Aut}(dV_n)$ and $\text{Out}(dV_n)$ Using Transducers	None

## Education

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### St Andrews University – MMath (Hons) Mathematics (Fast Track)

Year	Modules	Average Grade
2017/18	Topics in Groups, Independent Study (Algebraic Topology), Real and Abstract Analysis, Semigroups, Dissertation (Infinite Symmetric Groups)	19.1
2016/17	Graph Theory, Measure and Ergodic Theory, Real Analysis, Advanced Symbolic Computation, Galois Theory, Groups, Topics in Geometry and Analysis	19.3
2015/16	Analysis, Complex Analysis, Differential Equations, Finite Mathematics, Linear Mathematics 2, Algebra: Rings and Fields, Mathematical Programming, Number Theory, Statistical Inference, Topology	17.5
2014/15	Mathematics, Combinatorics and Probability, Multivariate Calculus, Topics in Mathematics: Problem-solving techniques, Abstract Algebra, Linear Mathematics, Mathematical Modelling, Vector Calculus	18.5

### Stewart's Melville College, Edinburgh

2013/14	Advanced Higher: Pure Mathematics (A), Applied Mathematics (A), Physics (A)
2012/13	Higher: Mathematics (A), Physics (A), Computing (A), Chemistry (A), English (D)

## Awards

St Andrews Dean's list 2015, 2016, 2017, 2018  
Duke of Edinburgh Bronze and Silver awards,  
Scottish Mathematical Council "Maths Challenge" gold awards

## Technical Skills

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Programming GAP, Python, LaTeX

## Work Experience

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| 2018-present | PhD Student at St Andrews (includes tutoring)  |
| 2017         | Laidlaw Programme, Undergraduate Research and Leadership Programme: Writing algorithms concerning commutative semigroups supervised by Dr James D Mitchell.  |
| 2016         | Charity Shop Assistant (Shelter)   |
| 2013         | Heriot Watt University photonics department work experience: minimising transmission loss of lasers through various mediums using precise equipment set-ups. |

## Positions of Responsibility

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| 2016-present | Treasurer of St Andrew's Anime Society |
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## Interests & Activities

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Maths, Anime, Japanese, Video/Board games.

## Referees

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Dr Collin Bleak, My St Andrew's Supervisor, E-mail: [cb211@st-andrews.ac.uk](mailto:cb211@st-andrews.ac.uk)  
Dr James D Mitchell, My St Andrew's Supervisor, E-mail: [jdm3@st-andrews.ac.uk](mailto:jdm3@st-andrews.ac.uk)