

# Murray Tannock

M.Sc. STUDENT · UNIVERSITY OF REYKJAVIK

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## Education

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### University of Reykjavik

M.Sc. COMPUTER SCIENCE

- M.Sc. Thesis - Concurrent avoidance of Classical and Mesh Patterns (*Tentative Title*)
  - Supervised by Henning Ulfarsson.
- Expected Graduation - June 2016

Reykjavik, Iceland

Aug. 2014 - PRESENT

### University of St Andrews

B.Sc. (HONS.) MATHEMATICS

- B.Sc. Final Project - *Turing Machines and Complexity Theory* - Supervised by Colva M. Roney-Dougal.

St Andrews, United Kingdom

Aug. 2010 - Jun. 2014

## Teaching Experience

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### University of Reykjavik

TEACHING ASSISTANT

Grading of continual assessment and exams. Provision of assistance during class.

Improval of logistics for assignment, collection and grading of programming assignments.

T-218-ALCO Algebra and Combinatorics

Spring 2016

E-402-STFO Mathematical Programming (3-week course)

Winter 2015

T-713-CRNU Cryptography and Number Theory

Fall 2015

CO-SUPERVISOR OF B.SC. PROJECTS IN COMPUTER SCIENCE

Spring 2015

Co-supervised two B.Sc. students at RU in undergraduate research project in association with H. Ulfarsson and Christian Bean.

## Publications and Preprints

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### ***Pattern avoiding permutations and independent sets in graphs***

C. BEAN, M. TANNOCK, H. ULFARSSON

Submitted 2016

<http://arxiv.org/abs/1512.08155>

## Refereeing Work for Journals

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**Discrete Mathematics & Theoretical Computer Science**, Special Edition for Permutation Patterns  
2015

## Presentations and Talks

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### Permutation Patterns 2015

London, United Kingdom

*Pattern Avoidance and Non-Crossing Subgraphs of Polygons.*

June 2015

Joint work with C. Bean and H. Ulfarsson

### 25th British Combinatorial Conference

University of Warwick, United Kingdom

*Pattern Avoidance and Non-Crossing Subgraphs of Polygons.*

June 2015

Joint work with C. Bean and H. Ulfarsson

## Other Projects

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### Permuta

PURE PYTHON MODULE FOR PERMUTATION PATTERNS

Permutation Pattern Library designed for research group at RU. Joint work with Bjarki Agust Gudmundsson, Tomas Ken Magnusson and H. Ulfarsson.

## SageTest

TESTING LIBRARY FOR SAGEMATHCLOUD

Basic Testing suite for SageMathCloud to allow for automated grading in courses at RU using the SageMath System.

## SMCHomeworkGeneration

SEMI-AUTOMATED ASSIGNMENT GENERATION FOR SAGEMATHCLOUD

Automated Assignment generation for SageMathCloud compatible with SageTest providing faster deployment of assignments in classes involving programming assignments.

## OEIS.jl

OIES WRAPPER FOR THE *Julia* PROGRAMMING LANGUAGE

Allows access to *The On-Line Encyclopedia of Integer Sequences*® from within a Julia script or REPL session.

## Conferences attended

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2015 **Permutation Patterns 2015**, 15-19 Jun.

London, United

Kingdom

University of

Warwick, United

Kingdom

Selfoss, Iceland

2015 **25th British Combinatorial Conference**, 6-10 Jul.

2015 **Stærðfræði á Íslandi 2015**, Mathematics in Iceland, 31 Oct.-1 Nov.

## Skills

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**Programming** Python, L<sup>A</sup>T<sub>E</sub>X, Java, Julia, FORTRAN, Maple, R, Ruby, HTML, CSS and Javascript

## References

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### TEACHING

#### Henning Ulfarsson

Reykjavik, Iceland

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### ACADEMIC

#### Colva M. Roney-Dougal

St Andrews, United Kingdom

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