

# Frances Cooper | CV

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## Education

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| <b>University of Glasgow</b><br><i>PhD Computing Science</i> <ul style="list-style-type: none"><li>Thesis title: Open problems in the area of matching under preferences</li><li>School of Computing Science research student representative</li><li>Tutor; member of several committees (see <i>Committees</i> section)</li></ul> | <b>Glasgow, Scotland</b><br>2015 - present |
| <b>University of Glasgow</b><br><i>MSc Software Development, Distinction</i> <ul style="list-style-type: none"><li>Member of committee (see <i>Committees</i> section)</li></ul>   | <b>Glasgow, Scotland</b><br>2013 - 2015    |
| <b>Open University</b><br><i>BSc Mathematics, 1st Class (Hons)</i> <ul style="list-style-type: none"><li>Distance learning degree whilst working</li></ul>   | <b>UK-wide</b><br>2009 - 2013              |

## Internships

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| <b>Amazon Internship</b><br>3 month internship at Amazon Development Centre, Edinburgh | <b>Edinburgh, Scotland</b><br>April - June 2018 |
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## Awards and Scholarships

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| <b>3 Minute Thesis Finalist:</b> <ul style="list-style-type: none"><li>Competition to explain your thesis to a non-technical audience</li><li>University of Glasgow Finalist and College of Science and Engineering Commendee</li></ul>               | 2017        |
| <b>EPSRC PhD Scholarship:</b> <ul style="list-style-type: none"><li>Funded PhD in Computer Science, University of Glasgow (3.5 years)</li></ul>   | 2015 - 2019 |
| <b>Confucius Institute Scholarship, China:</b> <ul style="list-style-type: none"><li>Won a scholarship after previous Chinese language study</li><li>Attended a <i>Language and Culture Exchange</i> at Nankai University in Tianjin, China</li></ul> | Summer 2015 |
| <b>Class Prize:</b> <ul style="list-style-type: none"><li>MSc Software Development <i>highest overall grade</i> (21.2 / 22.0)</li></ul>   | 2013 - 2015 |
| <b>Grace Hopper Prize:</b> <ul style="list-style-type: none"><li>MSc Software Development <i>highest achieving female student</i></li></ul>   | 2013 - 2015 |
| <b>SFC MSc Scholarship:</b> <ul style="list-style-type: none"><li>Funded MSc in Software Development, University of Glasgow</li></ul>   | 2013 - 2015 |

## Computing skills

**General computing skills:** Java, Python, Scala, Gurobi, Bash, Django, HTML,  $\text{\LaTeX}$ , Git  
**Areas of interest:** Algorithms & Complexity, Integer/Constraint Programming, Optimisation

## Conference Presentations

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### **(future) SEA conference talk - paper presentation**

**L'Aquila, Italy**

*Symposium on Experimental Algorithms*

*June 2018*

- Paper title: A  $3/2$ -Approximation Algorithm for the Student-Project Allocation Problem

### **BCTCS conference talk**

**Royal Holloway, England**

*British Colloquium of Theoretical Computer Science*

*March 2018*

- Title: A  $3/2$ -Approximation Algorithm for the Student-Project Allocation Problem

### **Invited speaker AWIDM**

**Cape Town, South Africa**

*Invited speaker at African Women in Discrete Mathematics conference*

*January 2018*

- Encouraging women graduates into academic research roles

### **SICSA poster presentation**

**Dundee, Scotland**

*The Scottish Informatics & Computer Science Alliance*

*June 2017*

- Title: Hard Variants of the Student-Project Allocation Problem \*shortlisted

### **MATCH-UP poster presentation**

**Boston, USA**

*Microsoft Research Centre MATCH-UP conference*

*April 2017*

- Title: Integer Programming for Student-Project Allocation

## Publications

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### **(accepted) SEA conference paper submission:**

*June 2018*

- *Symposium on Experimental Algorithms*

- Title: A  $3/2$ -Approximation Algorithm for the Student-Project Allocation Problem

- Author list: Frances Cooper and David Manlove

## Committees

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**School of Computing Science Research Students Committee:**

*2017 - 2018*

**BCTCS conference 2018 organising committee:**

*2017 - 2018*

**College of Science and Engineering Graduate School Board:**

*2017 - 2018*

**Athena SWAN committee (promoting gender equality in CS):**

*2015 - 2016*

**MATCH-UP and COST Action conference 2015 organising committee:**

*2015 - 2016*

## Languages

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**English:** Native proficiency

**Mandarin:** Beginner/Intermediate

*Hanyu Shuiping Kaoshi (HSK) level 2 certificate*

**British Sign Language (BSL):** Beginner

*level 1 certificate*

## Experience

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Whilst studying for my BSc I worked and volunteered in the care and education sectors.