Moving towards Gender Equality at Computer Science, TU Dublin

Dr. Svetlana Hensman
Prof Sarah Jane Delany, Dr. Susan McKeever
<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
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<tbody>
<tr>
<td>1000 undergraduate students</td>
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<tr>
<td>200+ postgraduate students</td>
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<tr>
<td>60+ PhD students</td>
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<td>40+ academic staff</td>
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<td>Avrg. 25% UG female students</td>
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Winner
Minerva Equality Award 2019

“Developing the careers of female faculty”

Runner-Up
Minerva Equality Award 2018

“Encouraging female students to enrol in Computer Science programmes and retaining them”
CS4All Initiative

Evidence based approach

Retention
Recruitment
Female Experience
Strategic actions
Retention

30% - 50%, averaging 45%, first year retention
Link between progression and attendance
Link between programming skills and success in later years

- Monitored attendance with active follow-up
- Graded work in labs to encourage attendance
- Thresholds on programming exam
Recruitment

Over 40% of computer science programmes in Ireland had **less than 10% female** new entrants in 2014-15

- Introduced new hybrid programme including languages and mobility
- Free coding classes for non-tech girls
- Computing Academy for transition year secondary school students
Female Student Experience

Identified female students experienced isolation and difficulty in finding peer groups

... but did not want ‘special treatment’

- Girls places with other girls in lab groups
- Regular meet ups
Strategic actions

Established INGENIC network across HEIs in Ireland

Increase Enrolment of female-identifying students on third-level computing programmes

Improve Experiences of female-identifying students in computing programmes

Assist Staff to identify and develop methods of improving gender diversity and equality

Collaborate across Higher Education Institutes

https://www.ingenic.ie
Strategic actions

Mentorship programme for students

Role models from Industry as mentors to students

Format - regular events with activities and discussion with mentors

Strategic actions

Best Practice Toolkit for Gender Equality in Computer Science Education

Comprehensive review of literature for initiatives with impact
https://arxiv.org/pdf/2206.06113

Development of an online toolkit to encourage use of these initiatives

Project funded by Irish government & Huawei

https://ascnet.ie/techmate/
Strategic actions

A network of staff across TU Dublin with aim of increasing diversity and retention in technology programmes

Events such as Meet & Greet for new students, IWD events, etc.

Workshops with female students to help them apply for scholarships
Impact

New female students per year (%) for our hybrid programme vs the non-hybrid ones
Thank you!

Svetlana Hensman
Svetlana.Hensman@TUDublin.ie