

NTNU – Trondheim
Norwegian University of
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Letizia Jaccheri

Gender Issues in Computer Science Research, Education, and Society



<https://www.ntnu.edu/employees/letizia.jaccheri>

About me – the Lecture

- Master in Computer Science
University of Pisa
- Exchange student NTH 1989 –
professor Reidar Conradi
- PhD in Software Engineering
- Professor since 2002
 - Research
 - Education
 - Department head – 2013 – 2017
- **Conradi - Norwegian Centre for
Software Research – SFF ++ 2020**
- NFR IDUN
<https://www.ntnu.edu/idun>
- EU COST ACTION CA19122
<https://www.cost.eu/actions/CA19122/#tabs|Name:overview>
- ACM Distinguished Speakers
Lecture
https://speakers.acm.org/speakers/jaccheri_10303

Software and UN Goal 5

- Challenge 1: A fundamental change in perspective of value in software processes to bring focus to the social impact of software and sustainable and ethical considerations.
- Challenge 2: Incorporate AI in the software development process.
- Achieve **gender equality** and empower all **women** and girls. Ending all discrimination against **women** and girls is not only a basic human right, it's crucial for sustainable future; it's proven that empowering **women** and girls helps economic growth and development.



IDUN – from PhD to Professor 1 Mio. Euro 2019 – 2022

Background:

581 employees in scientific positions – 22% female

125 professors – 13,8% female

Challenge:

- Too few women at master level
- Dropout from phd to professor

Main idea and measure:

9 Excellent **researchers** as Adjunct professors from National and International Universities ([Jana Jágerská - ERC](#))

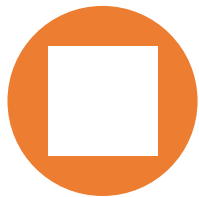


Idun Reiten, the first female professor at the Faculty of Information Technology and Electrical Engineering, Norwegian University of Science and Technology (NTNU)

COST CA 19122 EUGAIN - 37 member countries – 4 years - Chair: Jaccheri; Grant holder: Informatics Europe

- The main challenges addressed:

- How to have more girls choosing Informatics as their higher education studies and profession.
- How to retain female students and assure they finish their studies and start successful careers in the field.
- How to encourage more female Ph.D. and postdoctoral researchers to remain in the academic career and apply for professorships in Informatics departments.
- How to support and inspire young women in their careers and help them to overcome the main hurdles that prevent women to reach senior positions in the field.
- How to leverage from the experience of the partners in the network to tackle the previous challenges and achieve progress across more institutions and countries, and positive results that are sustained on the longer term.



**WG1: FROM SCHOOL
TO UNIVERSITY**



**WG2: FROM
BACHELOR/MASTER
STUDIES TO PH.D.**



**WG3: FROM PH.D.
TO PROFESSOR**



**WG4: COOPERATION
WITH INDUSTRY
AND SOCIETY**



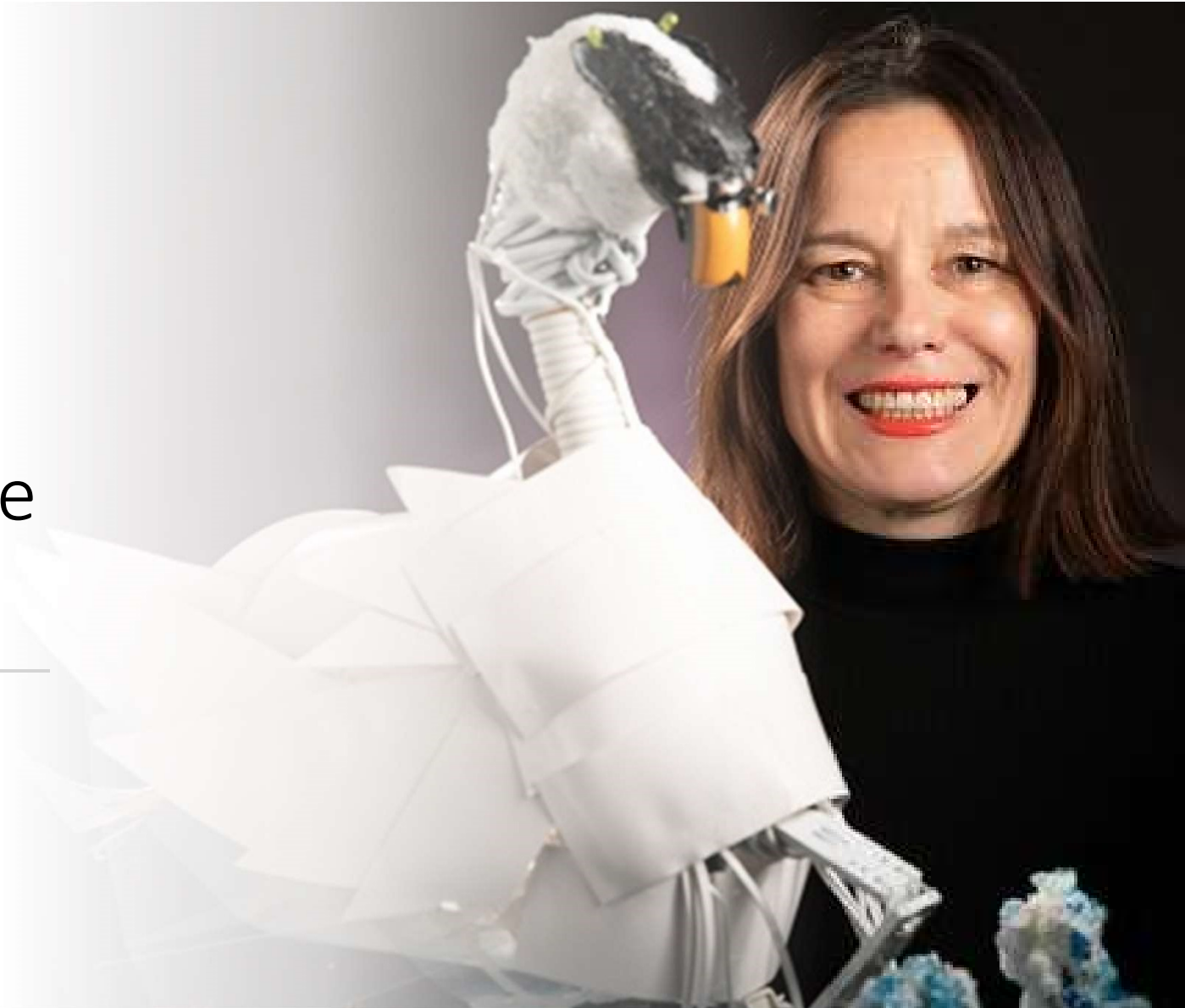
**WG5: STRATEGY &
DISSEMINATION**



ACM ACM Distinguished Speakers Lecture

From Software through Art to Social
Entrepreneurship

Gender Issues in Computer Science
Research, Education, and Society



Software engineering and gender

- People decide requirements
- People develop solutions for people
- People Interact with systems

Software engineering and gender

- People decide requirements
- People develop solutions for people
- People Interact with systems

Question: who decides the requirements and for which people?

Designing Software to Prevent Child Marriage Globally, J Brevik, L Jaccheri, JCT Vidal, Proceedings of the 18th ACM International



Software engineering and AI

People

- Decide requirements
- Develop solutions for people
- Interact with systems

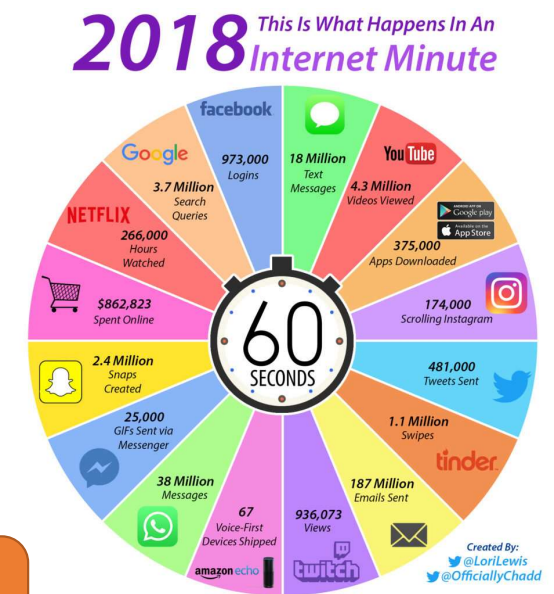


腾讯
Tencent

Computer system

- learns

big data



Question: who decides how the system will learn?



• Conferences

- Grace Hopper Celebration. <https://ghc.anitab.org>
- ACM ACM Celebration of Women in Computing womENCourage
- <http://ieee-wie-ilc.org/>



• Projects at Universities

- The Girl Ada Project. <https://www.ntnu.edu/girls>
- CS4All initiative, School of Computing, TU Dublin, www.dit.ie/computing/studentresources
- Irène Curie Fellowship at TU Eindhoven. <https://www.tue.nl/en/working-at-tue/scientific-staff/irene-curie-fellowship>
- Gender Initiative Chalmers <https://www.chalmers.se/en/about-chalmers/Chalmers-for-a-sustainable-future/initiatives-for-gender-equality/gender-initiative-for-excellence/Pages/default.aspx>
- EQUAL-IST Project. <https://equal-ist.eu>
- IDUN project at NTNU. <https://www.ntnu.edu/idun>



• Policy Documents and white papers

- Women in Digital. Digital Single Market Policy. <https://ec.europa.eu/digital-single-market/en/women-ict>
- <https://unesdoc.unesco.org/ark:/48223/pf0000367416>
- EU Report of the Expert Group “Innovation through Gender” <https://op.europa.eu/en/publication-detail/-/publication/d15a85d6-cd2d-4fbc-b998-42e53a73a449>
- SHE Figures https://ec.europa.eu/info/publications/she-figures-2018_en
- ELSEVIER The researcher journey ... <https://www.elsevier.com/research-intelligence/resource-library/gender-report-2020>
- Informatics Europe Report on Informatics Education in Europe <https://www.informatics-europe.org/publications.html>



• International Networks

- Informatics Europe WIRE <https://www.informatics-europe.org/working-groups/women-in-icst-research-and-education.html>
- ACM Women in Computing Europe. <https://europe.acm.org/acm-we>
- European Centre for Women and Technology. <http://www.ecwt.eu>
- CEPIS Women in ICT Task Force. <https://www.cepis.org/index.jsp?p=1142&n=2909>