# Building Community of LGBTIQ+ ICT Researchers --- Final Report

**APPLICANTS** prof.dr. Alexander Serebrenik (TU/e, Social Software Engineering, CS, M&CS; <u>a.serebrenik@tue.nl</u>, 040 2473595), prof. dr. ir. Roland van Rijswijk-Deij (UT, Design and Analysis of Communication Systems, EE, EEMCS), prof. dr. Rineke Verbrugge (UG, Multi-Agent Systems, Artificial Intelligence), prof. dr. Eugenio Cantatore (TU/e, Integrated Circuits, EE), prof. dr. ir. Han La Poutré (TUD, Intelligent Electrical Power Grids, EE, EEMCS).

GOAL The goal of this proposal is to create a healthy community of LGBTIQ+ researchers working on different areas of ICT. Climate in the engineering disciplines is problematic for LGBTIQ+<sup>1,2</sup>, and electrical and software engineering, are seen as less LGBTIQ+-friendly than, e.g., chemical engineering.<sup>3</sup> At the moment, initiatives targeting LGBTIQ+ ICT-researchers are either local and not ICT-specific (e.g. True U at TUD, Compass at TU/e, Think with Pride! at UTwente), or ICT-specific but consider multiple diversity axes (e.g., the IPN EDI). As it is in general easier to relate to someone similar to oneself (phenomenon known as homophily in sociology), we believe that LGBTIQ+ community specifically focussed on ICT can benefit the researchers more than a broad LGBTIQ+ research community that encompasses all disciplines. Moreover, this community will strengthen the cross-institutional ties supporting ICT research as a whole.

#### **ACHIEVEMENTS**

#### Workshops

We intended to use the funding provided to organize two workshops, a <u>closed workshop</u> bringing together LGBTIQ+ ICT researchers and an <u>open workshop</u> celebrating achievements of LGBTIQ+ ICT researchers in the Netherlands.



This workshop was supposed to be open to everyone and to be collocated with a national event (e.g., Alice and Eve celebrating women in computing or ICT Open).

The closed workshop was organized in Utrecht on December 5, 2023 and attracted ICT researchers from three Dutch institutions. The topics discussed were related to inclusion in the workplace as well as in our respective scientific communities. Instead of organizing an open workshop, we have opted for a Diversity and Inclusion session at ICT Open 2023, celebrating achievements of LGBTIQ pioneers in ICT as well as providing the stage to the new generation of ICT researchers. The photo on the left has been taken during the session: dr. Odette Scharenborg and Flip van Spaendonck (left) have shared their experiences as out LGBTIQ+ researchers in academia.

prof. Serebrenik (right) was chairing the session and the slide on the screen shows accomplishments of five LGBTIQ+ ICT pioneers: Christopher Strachey, Edith Windsor, Jon 'maddog' Hall, Lynn Conway and Peter Landin.

This Diversity and Inclusion session had impact beyond the LGBTIQ+ community: the upcoming 2024 edition of ICT Open will feature another Diversity and Inclusion session focusing on neurodiversity in ICT research.

### **Education**

As planned we have prepared a list of educational DOs and DONTs creating a more inclusive environment for LGBTIQ+ students in ICT. This list has been collected with the help of our international peers, and reviewed both by the project team and by the members of the IPN working group on diversity and inclusion. The list is available on <a href="https://www.4tu.nl/nirict/Documents/project-dos-and-donts-for-a-more-inclusive-environment-for-lgbtiq-students-in-ict-1-1.pdf">https://www.4tu.nl/nirict/Documents/project-dos-and-donts-for-a-more-inclusive-environment-for-lgbtiq-students-in-ict-1-1.pdf</a>





Danielle Berry (1949 - 1998)

Game designer and programmer at Ozark Softscapes, EA and MicroProse, known for the 1983 game M.U.L.E., one of the first influential multiplayer video games, and 1984's The Seven Cities of Gold, one of the earliest open world video games.



Alan Turing (1912 - 1954)

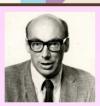
Mathematician, computer scientist and logician. Known for pioneering the field of modern computer science by introducing the Universal Turing Machine, proving undecidability of the Halting Problem, cryptanalysis of the Enigma, and the Turing test, a foundation of modern artificial intelligence.



Antonia Jones (1943 - 2010)

Professor of Evolutionary and Neural Computing at Cardiff University. Known for acoustic pattern recognition and exposing various security loopholes in banking infrastructure, including identifying significant potential fraud at HSBC.

We have hired student-assistent to create a poster celebrating famous LGBTIQ+ ICT people similar to Notable Women in Computing poster.<sup>5</sup> Together with the Do's and Don't list the poster has been sent to all Dutch institutions higher education offering educational programs on Electrical Engineering, Computer Science, Data Science and Artificial Intelligence. We have encouraged the educational directors to hang the posters places where many students can see them. For example, in Eindhoven the poster can be found at the open space in MetaForum, next to the reception desk of the student services: students from all majors can be expected to be there and see our poster.



Peter Landin (1930 - 2009)

Emeritus Professor of
Theoretical Computation at
Queen Mary University
of London. Known for inventing
the SECD machine, the ISWIM
programming language,
defining the Landin off-side
rule, and coining the term
syntactic sugar.

With thanks to 4TU.NIRICT: https://www.4tu.nl/nirict/



Christopher Strachey

(1916 - 1975)

Computer scientist,
mathematician and physicist.
Known for denotational
semantics, pioneering
programming language design,
computer time-sharing,
developing the first computer
generated literature, and
possibly the first video game.



## Edith Windsor (1929 - 2017)

Technology manager at IBM, founder and software development consultant at PC Classics, and LGBTIQ+ rights activist. Known for: Systems architecture, pioneering the implementation of operating systems and natural language processors.



The poster has also been advertised by I&I, the Dutch national association of the computer science teachers at secondary schools, and we have received more than from twenty requests teachers. Finally, the poster and the Do's and Don'ts document have been sent to student associations. Overall, we have sent the documents more than fiftv

destinations, and while most of them are in the Netherlands, we have also sent them to Belgium, Canada, Finland, Iceland, and Spain.

### Communication

We have planned to host the community website under <a href="https://ict-research.nl/">https://ict-research.nl/</a>. Instead of a website we have opted for a mailing list: <a href="https://listserver.tue.nl/mailman/listinfo/ict-pride">https://listserver.tue.nl/mailman/listinfo/ict-pride</a>

### WHAT HAS NOT BEEN DONE

Two more activities have been planned: <u>a cross-institution mentoring scheme</u> and <u>a special issue of a journal</u>. While the more senior members of the community are open to support such a mentoring scheme, the interest among the more junior members of the community proved to be limited suggesting that they are receiving adequate mentorship at their workplace. We have also planned a publication of a <u>special issue</u> of a journal or a magazine akin to the special issue "Out in Inorganic Chemistry" of Inorganic Chemistry that has recently showcased the research of LGBTIQ+ researchers.<sup>4</sup> However, this idea has also been rejected upon further consideration: researchers prefer to publish their original work in their respective scientific communities.

References <sup>1</sup>Cech, Pham. Queer in STEM Organizations: Workplace Disadvantages for LGBT Employees in STEM Related Federal Agencies. Soc. Sci. 2017, 6, 12. <sup>2</sup>Sansone, Carpenter. Turing's children: Representation of sexual minorities in STEM. PLOS One. <sup>3</sup>Cech, Waidzunas. Navigating the heteronormativity of engineering: the experiences of lesbian, gay, and bisexual students, Eng Stud 3(1)1-24, 2011 <sup>4</sup>https://pubs.acs.org/toc/inocaj/61/14 <sup>5</sup>https://notabletechnicalwomen.org/