Inclusive logic:
Less talk, more action!

Credit: Dreamstime

Logic Mentoring Workshop @ CSL
Elaine Pimentel - UCL
14 February 2022

Outline

01 Why should I care?

02 Actions -- gender

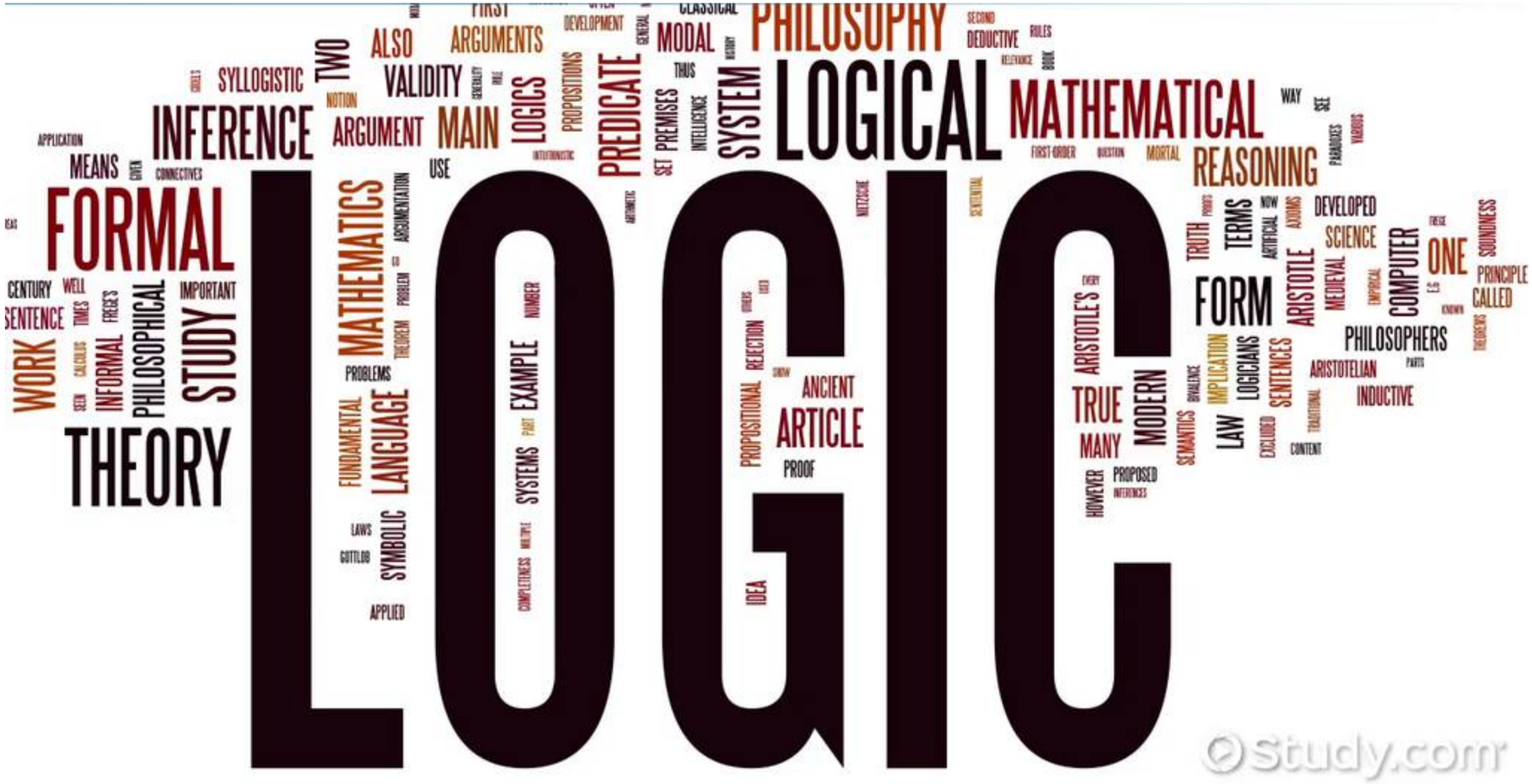
03 Actions -- race

04 Actions -- research

1

Caring

Logic, you gorgeous!!



1

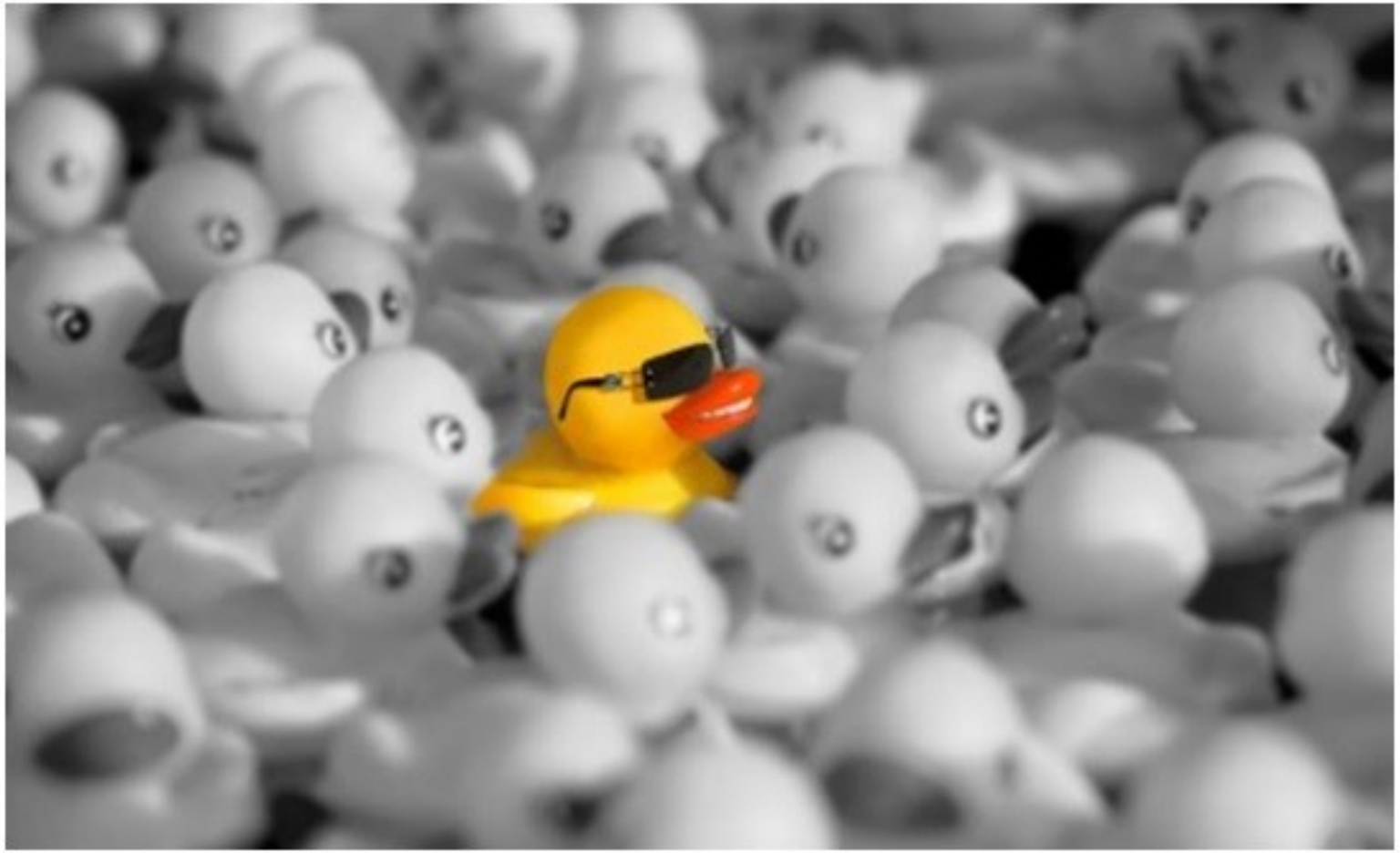
Caring

Logic, you gorgeous!!

1

Caring

Or the happy *grimme ælling*?

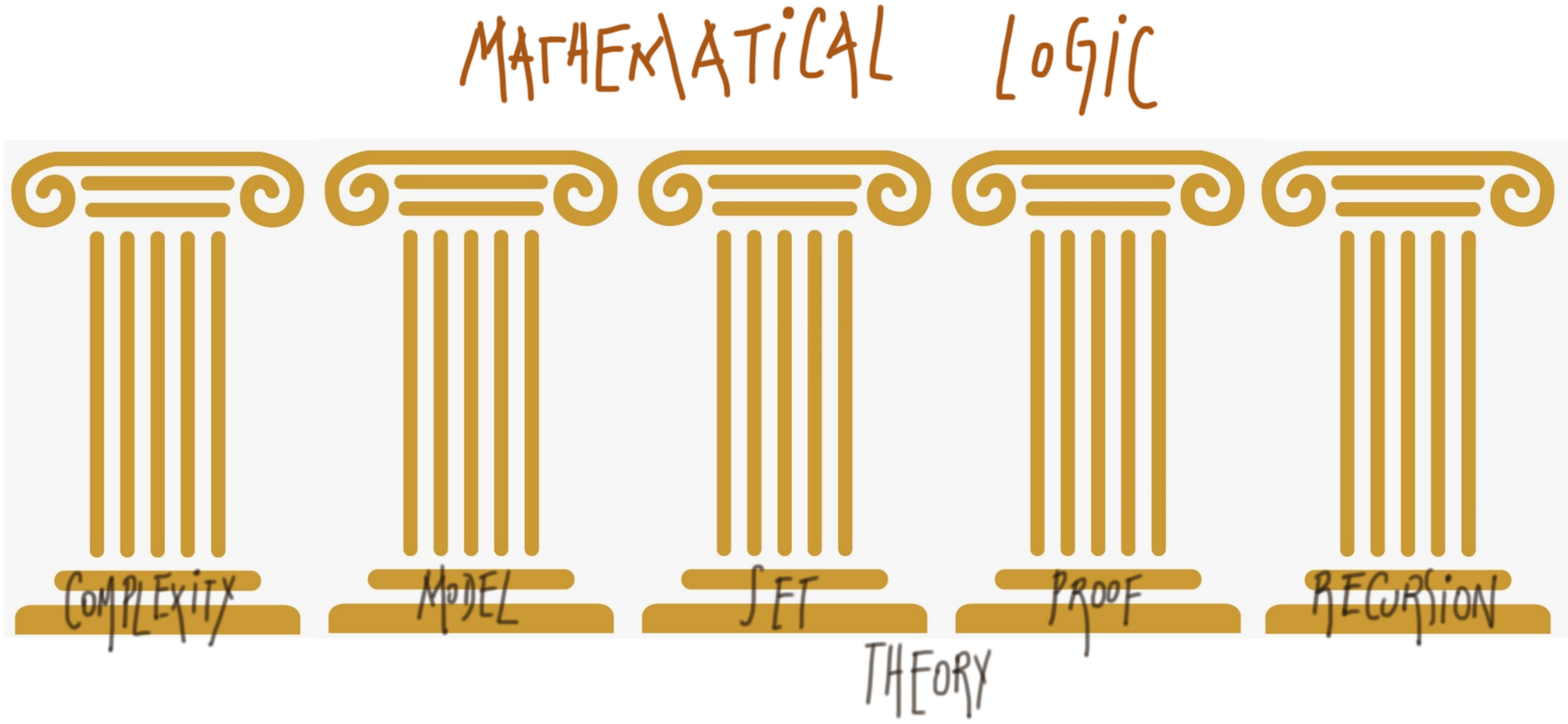


Credit: Digital senior

1

Caring

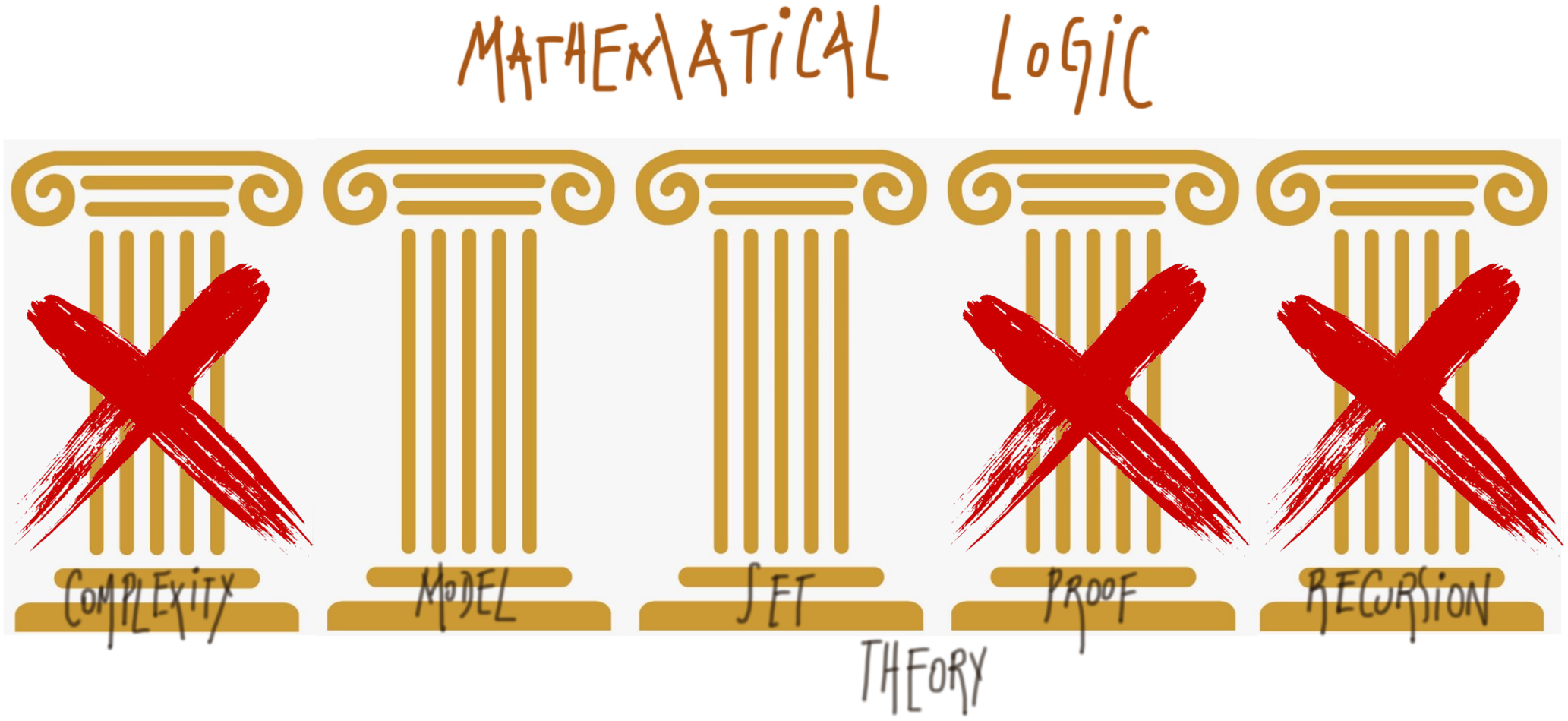
In Math



1

Caring

In Math



1

Caring

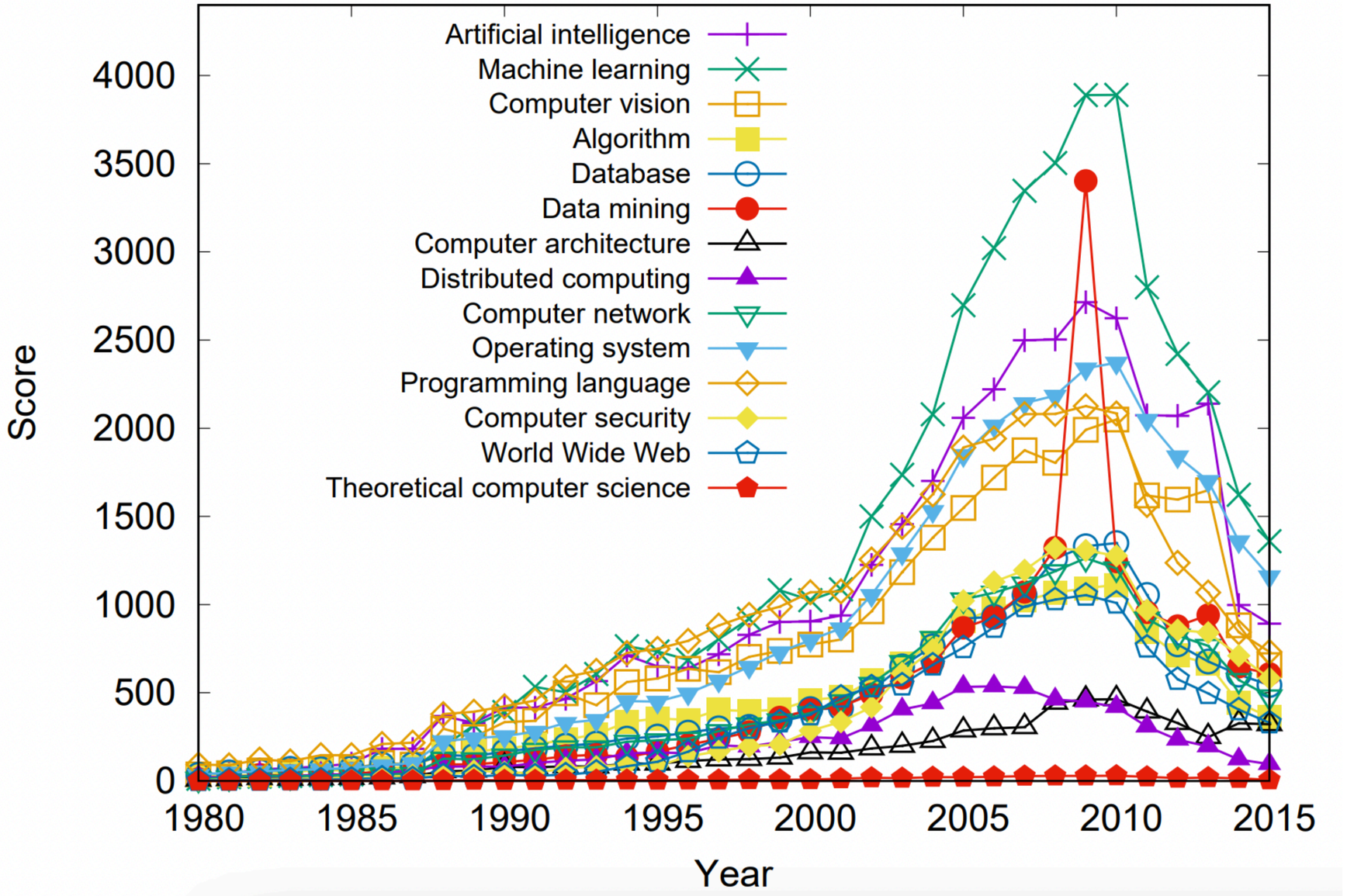
In Philosophy

Código	Disciplina	Créditos	Área
206474	EPISTEMOLOGIA	004 002 000 000	AC
207616	ESTÉTICA E FILOSOFIA DA ARTE	004 002 000 000	AC
202681	ÉTICA FILOSÓFICA	004 002 000 004	AC
206512	FILOSOFIA ANTIGA	004 002 000 000	AC
100609	FILOSOFIA CONTEMPORÂNEA	004 002 000 000	AC
207624	FILOSOFIA DA CIÊNCIA	004 002 000 000	AC
102539	FILOSOFIA GERAL E METAFÍSICA	004 002 000 000	AC
206491	FILOSOFIA MEDIEVAL	004 002 000 000	AC
207608	FILOSOFIA MODERNA	004 002 000 000	AC
206482	FILOSOFIA POLÍTICA	004 002 000 000	AC
201405	INTROD À HISTÓRIA DA FILOSOFIA	004 002 000 004	AC
201448	INTRODUÇÃO A PRAT FILOSÓFICA	004 002 000 006	AC
206504	LÓGICA	004 002 000 000	AC
137391	MONOGRAFIA FILOSÓFICA	008 000 000 008	AC
136069	PROJ DE MONOGRAFIA FILOSÓFICA	004 000 000 005	AC
100587	TEORIAS FILOSÓFICAS LINGUAGEM	004 002 000 000	AC

1

Caring

In Computer Science

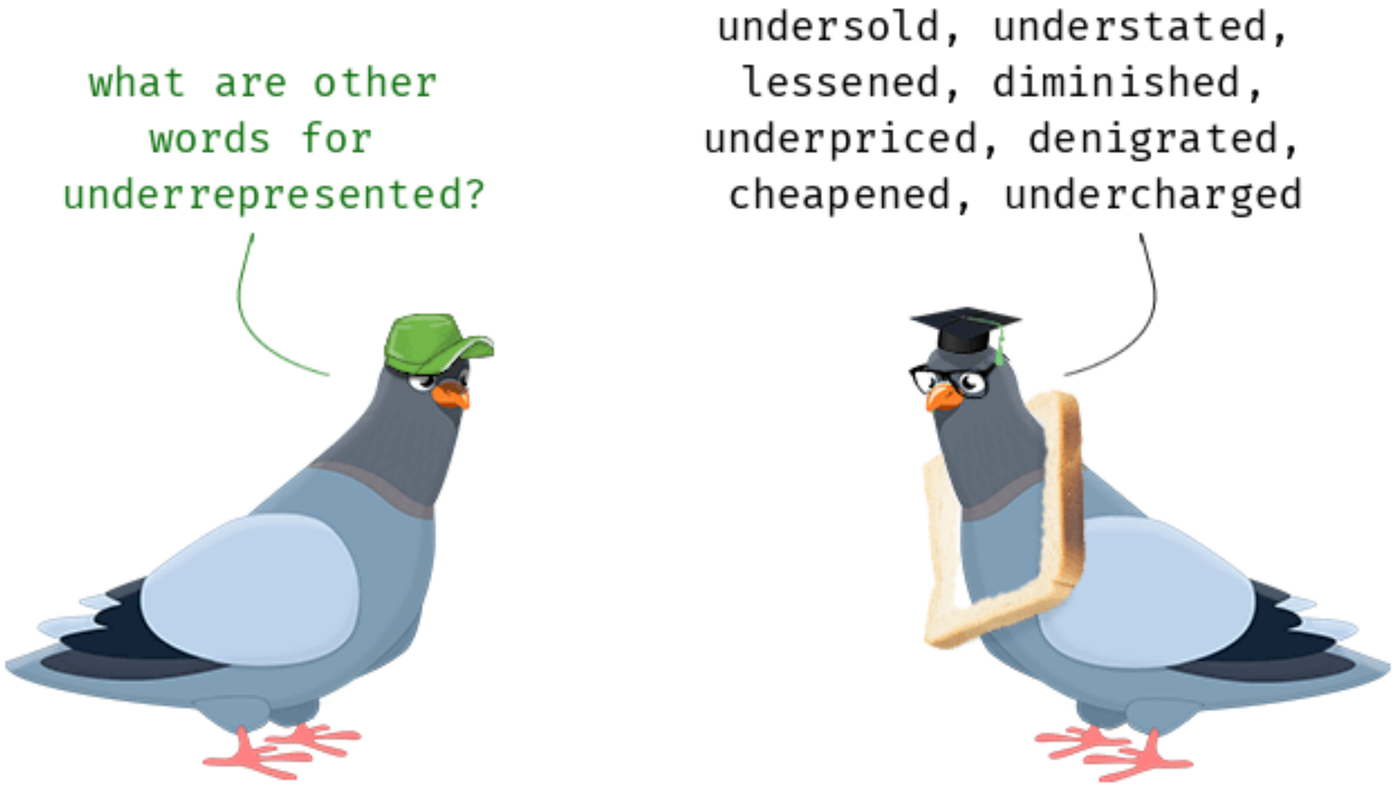


Analysing Trends in Computer Science Research
A Preliminary Study Using The Microsoft Academic Graph
Suhendry Effendy, Roland H.C. Yap
2017 International World Wide Web Conference Committee (IW3C2)

1

Caring

Little voice, almost no recognition



1

Caring

Underrepresentation within the underrepresentation

Credit: www

The lack of common diversity in various areas of knowledge is not different in logic

1

Caring

Underrepresentation within the underrepresentation

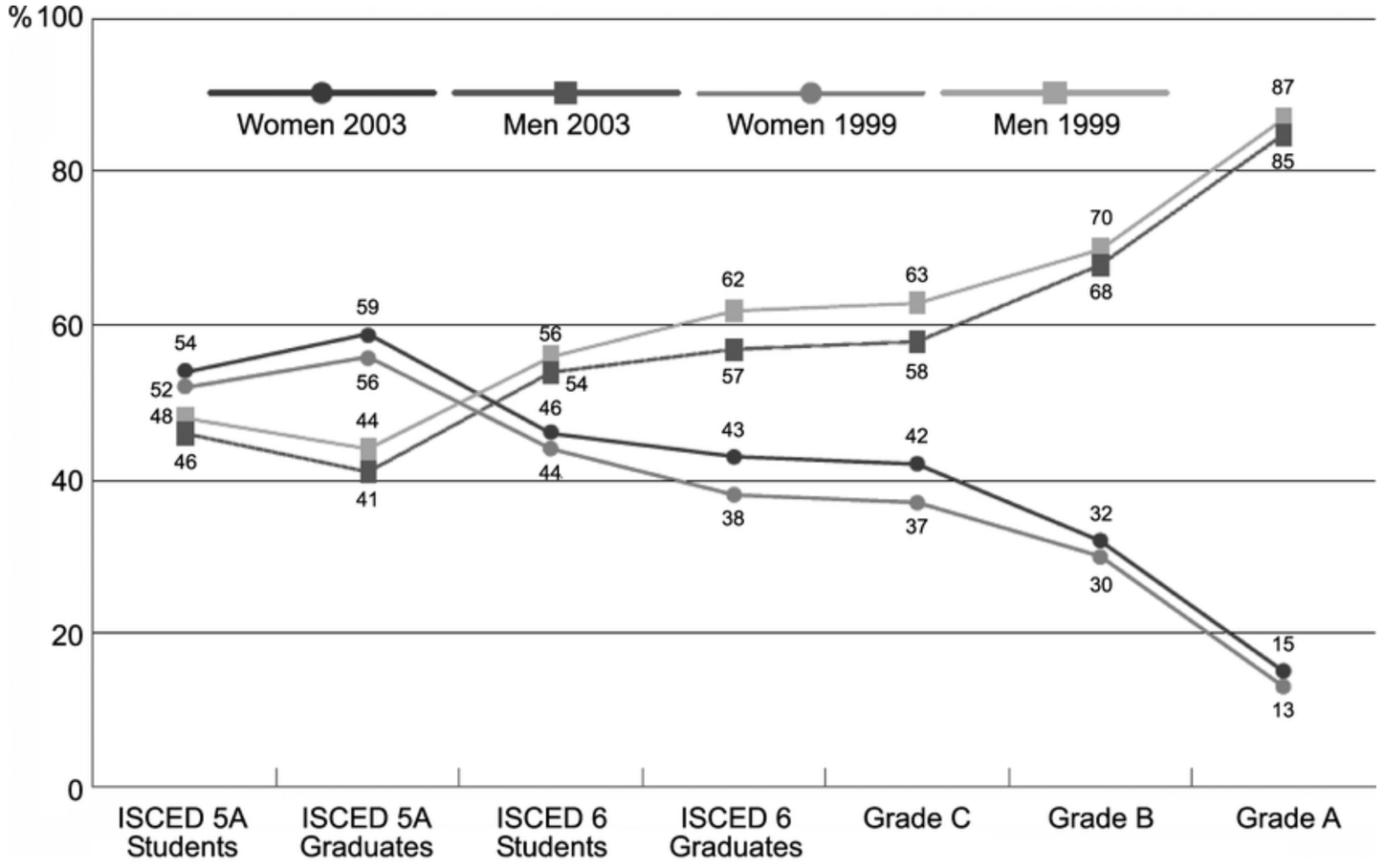
Credit: www

ACTIONS!

2

Actions
Gender

Women



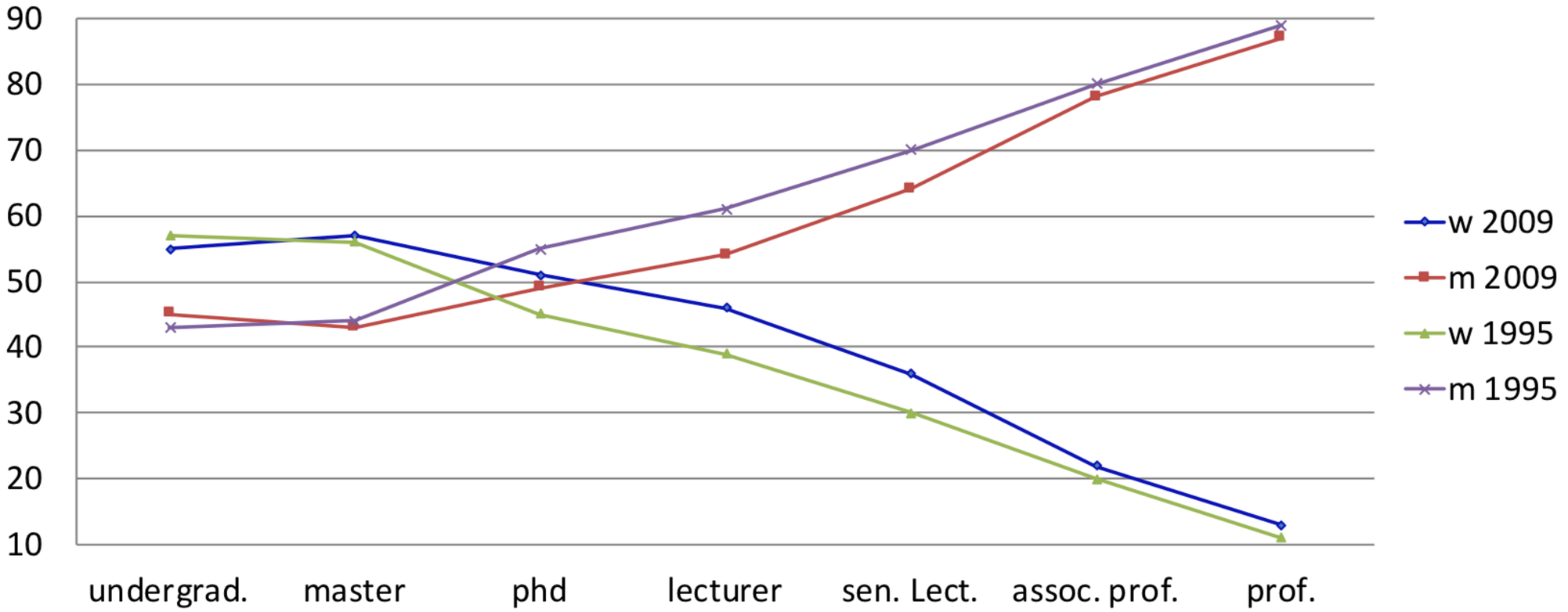
Source: European Commission (2007; Figure 3.1)

Proportions of men and women in a typical academic career, students and academic staff, EU-25, 1999-2003

2

Actions
Gender

Is it getting better? Should we sit and wait???



Data from The Hebrew University (Orna Kupferman, 2013)

2

Actions
Gender

Women in Logic

Conferences, Blog, Facebook, Twitter, Youtube, Mailing-list, Slack...

Webpage: https://sites.google.com/view/womeninlogic

2

Actions
Gender

Women in Logic

Valeria de Paiva (TOPOS Institute -- PUC-Rio)

2

Actions
Gender

Concrete actions!!!

If you are "in charge", try to:

- find adequate gender balance (conferences, pcs)
- look for more than numbers
- bring young female researchers to the spot!

2

Actions
Gender

Concrete actions!!!

If you are "in charge", try to:

- find adequate gender balance (conferences, pcs)
- look for more than numbers
- bring young female researchers to the spot!

If you are looking for opportunities, try to:

- speak up
- join communities
- go to conferences
- stay tuned!

2

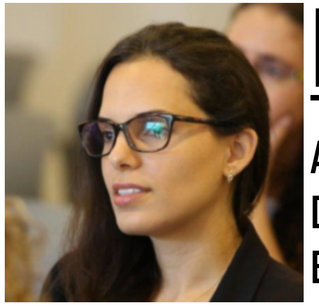
Actions
Gender

Problem: overloading!

SANDRA ALVES

Assistant Professor DCC-FCUP
Researcher at CRACS, INESC-TEC
Portugal

Co-chair: WiL2022, WiL2021, WiL2020
Organiser: CLAS 2022, Linearity-TLLA 2022
PC: TYPES 2022, TERMGRAPH 2022,
LSFA 2022, FoSSaCS2021, LSFA2021,
IWC2021, CSL2020, FSCD2020, LSFA2020...



LIRON COHEN

Assistant Professor
Department of Computer Science
Ben-Gurion University, Israel

Co-chair: ITP2022, ITP2021
PC: LICS2022, CSL2022,
TABLEAUX2021, HOPE2021
Invited talk: LMW2022, CADE2021,
CiE2021, HoTT2021..

ALEXANDRA SILVA

Professor
Computer Science Department
Cornell University, USA

Co-chair: CAV 2021, CALCO 2021,
WoLLIC 2020
Organiser: CLAS 2022, Linearity-TLLA 2022
PC-Member: FSCD 2021, CONCUR 2020,
MFPSXXXVI, CAV 2020, ESOP 2020,
POPL 2020
SC: LICS, PLMW, CMCS, ICE...

2

Actions Gender

Problem: overloading!

Elaine Pimentel

- Elaine Pimentel
  - Publications
  - Tools
  - Detailed info
  - World Logic Day
  - Women in Mathematics
  - Teaching
  - Academic background
  - Students
  - Personal

Associate Professor
Programming Principles, Logic, and Verification
Department of Computer Science
University College London

Full Professor (licensed) at DMAT/UFRN

President of the Brazilian Logic Society

Member of the LA committee of the Association for Symbolic Logic

Research Interests

- Proof theory, concurrency theory, ecumenical systems, game semantics, logical frameworks, linear logic, modal logics, intersection types, lambda-calculus.
- Ongoing research projects: MOSAIC, PROSA and PROGEO.

Past research projects.

Other interests

- I am also very much interested in all aspects of Diversity and Inclusiveness. Check it out the message from ASL!
- Project POTIMÁTICAS: Meninas Potiguares na Matemática: motivating girls to do Mathematics and Computer Science.
- Matemática: s.f. platform for women in Math.
- Lógicas Brasileiras: Brazilian women in logic.
- World Logic Day: check it out our initiatives!!

Conferences

- Invited speaker at: XIX SLALM, Logic Mentoring Workshop @ CSL, FSCD2021, Logic Colloquium 2021, LFMTP 2020, IJCAR 2020, II WMM, XVIII SLALM, LSFA2019, EBL2019, WoLLIC 2018, SYSMICS 2018, Filomena 2017, LL 2016, WoF 2015, Linearity 2014
- Co-chair of CSL 2023, WoLLIC 2022, TLLA 2021, LFMTP 2021 ...
- PC member of: IJCAR 2022, FoSSaCS 2022, LICS2022, LSFA 2022, WiL 2022, ...

Past conferences & more info.

2

Actions
Gender

Concrete actions!!!

Vienna Center for Logic and Algorithms

Helmut Veith Stipend: exceptionally talented and motivated female students (Ms CS)

Institute of Logic, Language and Computation of the University of Amsterdam

ILLC Diversity Talks, today with Isabelle Collet

Digital Technology and Gender Equality: A Challenge for Higher Education

3

Actions
Race

Eradicate racism

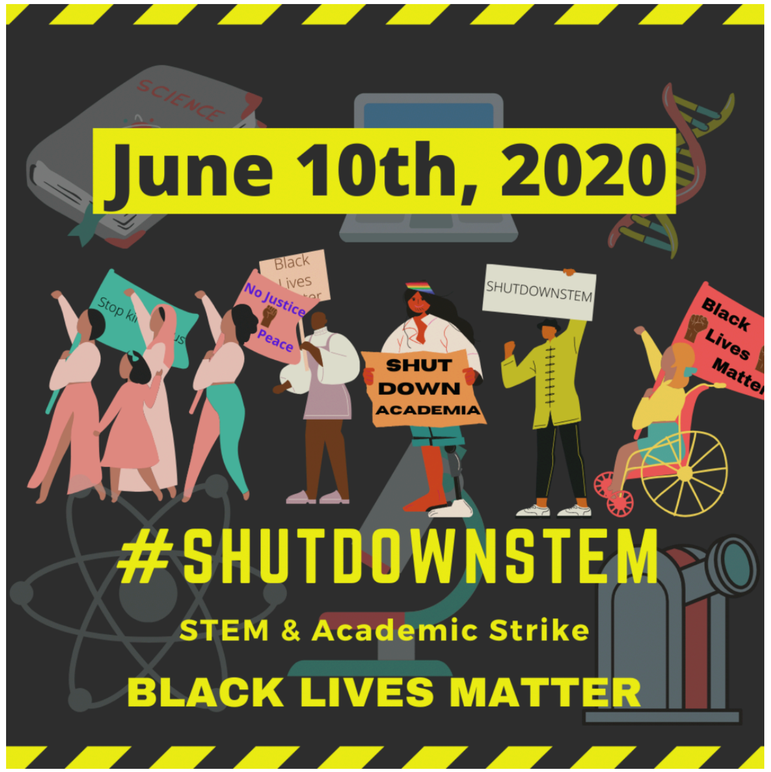
3

Actions
Race

#ShutDownLogic

Logic Supergroup in support of Black Lives Matter:

- met online for 24 consecutive hours of Inclusive Logic
- build concrete actions against racism in logic!



3

Actions
Race

#ShutDownLogic

- doing our small part to increase the diversity in logic;

3

Actions
Race

#ShutDownLogic

- doing our small part to increase the diversity in logic;
- commit to seeking funding from a broad range of sources in order to overcome barriers to participation in the supergroup;

3

Actions
Race

#ShutDownLogic

- doing our small part to increase the diversity in logic;
- commit to seeking funding from a broad range of sources in order to overcome barriers to participation in the supergroup;
- hosting periodic events to discuss, evaluate, and develop resources for logic education that are inclusive and that encourage participation in logic from a diverse audience;

3

Actions
Race

#ShutDownLogic

- doing our small part to increase the diversity in logic;
- commit to seeking funding from a broad range of sources in order to overcome barriers to participation in the supergroup;
- hosting periodic events to discuss, evaluate, and develop resources for logic education that are inclusive and that encourage participation in logic from a diverse audience;
- commit to developing, promoting, and enunciating guidelines and codes of conduct for our conferences, workshops and other events, as well as other events associated with our constituent organizations.

3

Actions
Race

Take action!

#ShutDownSTEM

3

Actions
Race

Take action!

If you are a student:

- Start a regular **equity-focused journal club** with peers.
- Start **conversations about racism** and anti-Blackness at department events.
- **Write to your faculty** and let them know that it's important that you see in their syllabus how they support the whole student, and specifically students who are marginalized.

#ShutDownSTEM

3

Actions
Race

Take action!

If you are a researcher:

- **Look at the resources** out there and compile what is important for others to know in order to share more widely with your networks.
- Make this a **daily practice**, not just this one day.
- **Who publishes your research**? Find out how those periodicals are responding to the current times and write to them letting them know that as a contributor and author, you want to see them work towards more equitable structures that highlights and prioritizes marginalized voices in their publication.

#ShutDownSTEM

3

Actions
Race

Take action!

If you are part of the leadership of a department:

- Define **transparent hiring and admission processes** that dismantle systemic and structural racism in the academic hierarchy
- **Allocate funds** for an equity library in your department
- Listen to criticism and **implement change**

#ShutDownSTEM

3

Actions Race

Concrete actions!!!

Home
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Announcements
Meetings
Rules for Abstracts
Student Travel Awards
Sponsorship of Meetings
Journals
Books
Inclusiveness
ASL Committees
ASL Membership
Other Information
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Contact

The following statement on diversity and inclusiveness was approved by the ASL Council on October 24, 2020.

Preamble

Distressing events in the USA and in other countries have increased our awareness of systemic racism and pervasive discrimination against disadvantaged or marginalized groups. Racism and discrimination are expressed in many different areas of social life, including education and employment. The ASL Council has adopted the following statement, which addresses the main areas in which the Association for Symbolic Logic plays a role.

Statement on Diversity and Inclusiveness

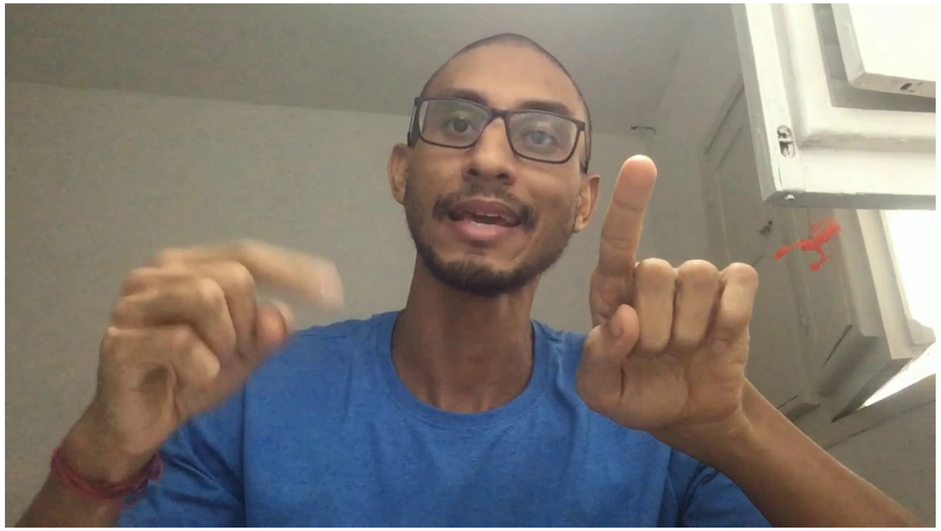
The Association for Symbolic Logic (ASL) recognizes that in societies around the world there are vulnerable groups of people that are marginalized and discriminated against because of race, color, caste, religion, national origin, ethnicity, migrant or indigenous status, socioeconomic status, political beliefs, gender, sexual orientation, gender identity or expression, and mental or physical disability. The ASL condemns, in the strongest possible terms, any form of marginalization and discrimination against individuals or groups of people based on such characteristics.

siveness/

3

Actions Race

Concrete actions!!!



Marcos Silva
UFPE

3

Actions
Race

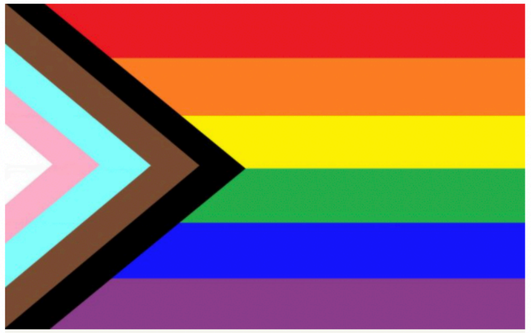
Concrete actions!!!

UCL Computer Science Race Equality Working Group Event: Action Not Just Words!

Gender Equality (Athena SWAN)

Neurodiversity

Disability Support



LGBTQ+

Race Equality

EDI Committee

4

Actions Research

Diversity also in research?

Looking for a job:

Nature de l'emploi :

☒ Maîtresse ou Maître de conférences / ☐ Professeure ou Professeur des universités

Article de recrutement : 26-I-1

Etat du poste : ☒ vacant / ☐ susceptible d'être vacant

Profil

Réseaux et Systèmes Distribués et Complexes

Titre et résumé du poste en anglais

Computer networking, distributed and complex networks

Future systems will be complex infrastructures with a high level of dynamicity. These systems will need to distribute the computation on a broad range of infrastructures going from IoT to cloud. This raises important questions related to analyzing, conceiving, deploying, and maintaining these infrastructures. The candidate will integrate one of the LIP6 research teams: Complex Networks, Delys, NPA.

Euraxess Research Field

Computer science

Enseignement

Filières de formation concernées

Licence et Master d'informatique de Sorbonne Université et parcours informatique de Polytech Sorbonne

Objectifs pédagogiques et besoin d'encadrement

La personne recrutée partagera à parts égales son service d'enseignement entre : 1) la Licence et le Master d'informatique, et 2) les enseignements d'informatique de Polytech Sorbonne.

Licence et master d'informatique :

En Licence, il est attendu un investissement de la personne recrutée dans les UE générales de L1 et, en L2/L3, les UE de système et réseaux.

En Master, selon son profil, la personne recrutée renforcera les enseignements des parcours « Réseaux » (RES) et « Systèmes et Application Réparties » (SAR).

Parcours RES :

Des besoins critiques sont identifiés dans les domaines suivants :

- Réseaux télécom 5G, 6G et au-delà
- Virtualisation et Programmation des réseaux (SDN et NFV)
- Cloud Networking et Cloud Native
- Sécurité des réseaux
- IoT (Internet des Objets)

Parcours SAR :

Les enseignements visés portent notamment sur la programmation répartie et autres domaines qui sont cruciaux pour la mise en œuvre de systèmes complexes massivement répartis, notamment les applications du Cloud.

Profil

Intelligence Artificielle : théorie et applications

Titre et résumé du poste en anglais

ARTIFICIAL INTELLIGENCE : theory and applications

The position is open to all areas of AI and its applications. The recruited professor will develop his/her research in the heart of AI (*e.g.* formal methods of AI, algorithms, deep and statistical learning, interpretable / explainable AI, symbolic AI) as well as at the interfaces of AI with other disciplines (*e.g.* biomedical, medicine, robotics). He/she will be able to develop and deploy models and algorithms aimed to process heterogeneous, incomplete, sparse, noisy and often unstructured data. The candidate will integrate one of the laboratories: ISIR, LIB, LIMICS or LIP6 depending on his/her research themes, and/or projects involving several host laboratories within SCAI (Sorbonne Center of AI).

Euraxess Research Field

Computer science

Enseignement

Filières de formation concernées

Licence - Master d'informatique

Objectifs pédagogiques et besoin d'encadrement

La personne recrutée interviendra de façon équilibrée sur les différents niveaux de formation, du L1 au M2.

La personne recrutée contribuera significativement aux enseignements de Licence d'informatique dont les besoins couvrent l'ensemble de la discipline (algorithmique, programmation (notamment objet, concurrente, fonctionnelle, web), mathématiques discrètes, structures de données, système, architecture, réseaux, compilation, bases de données...)

Pour ce qui concerne les enseignements en Master d'informatique, différents besoins seront à couvrir en fonction du profil de la personne recrutée. Plusieurs parcours sont concernés :

Parcours ANDROIDE : Le candidat ou la candidate retenue interviendra sur les thématiques de modèles décisionnels interprétables, apprentissage et prise de décision en milieux incertains, modélisation et analyse de comportements collectifs.

Parcours BIM : Le candidat ou la candidate retenue interviendra sur les thématiques de l'apprentissage automatique et profond, des sciences de données et de l'intégration des données biologiques et biomédicales dans le domaine de la bio-informatique.

Parcours DAC : Le candidat ou la candidate retenue interviendra dans les domaines de la gestion des données massives et des modèles et algorithmes d'analyse et d'apprentissage avancés (machine learning, apprentissage distribué, intelligence computationnelle).

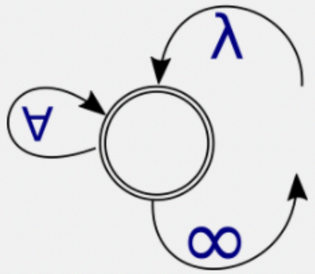
La personne recrutée sera amenée à prendre des responsabilités, notamment dans les UE à fort effectif de L1, en particulier concernant les sciences des données.

4

Actions Research

Where logic can apply?

Diversification of subjects, applications...



THEORY AND LOGIC GROUP

FACULTY OF INFORMATICS

TECHNISCHE UNIVERSITÄT WIEN

Agata Ciabattoni

Chris Fermüller

Medicine, Indian Philosophy, AI...

4

Actions Research

Where logic can apply?

UCL PPLV

Diversification of subjects, applications...

David Pym

Timo Lang

Alex Gheorghiu

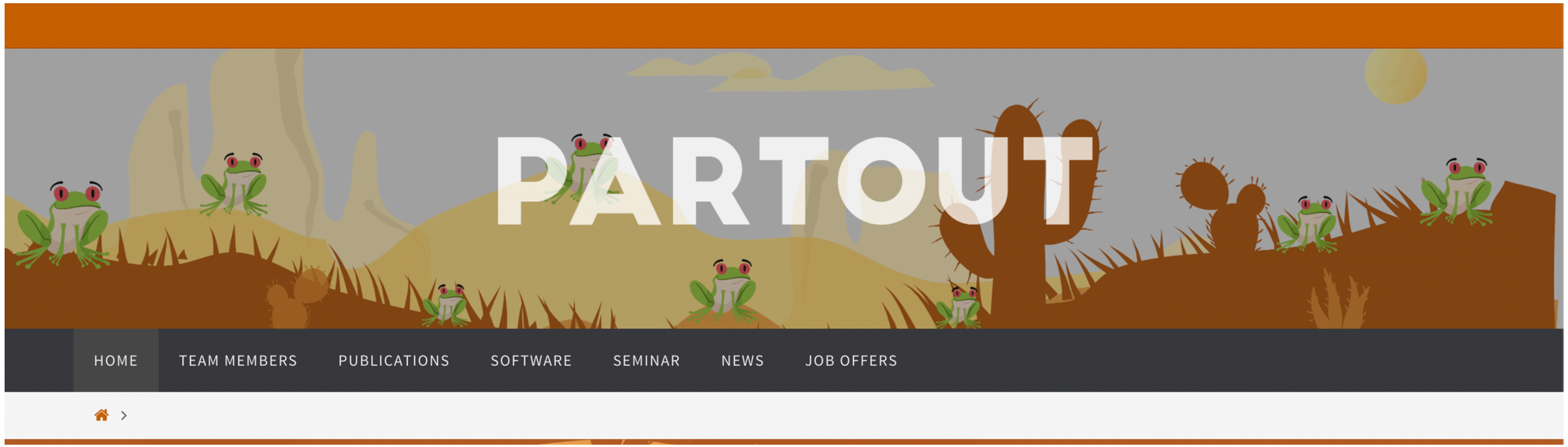
Merhnoosh Sadrzadeh

Security, Verification, Natural Language Processing...

4

Actions Research

Logic applied to logic



Proof Automation and RepresenTation:

a fOundation of compUtation and deducTion

Lutz Straßburger et al.
Inria, Research Center Saclay- Île-de-France and LIX, École Polytechnique

4

Actions Research

Proof Theory applied to Proof Theory :)

Anupam Das
University of Birmingham

Sonia Marin
University of Birmingham

Revantha Ramanayake
University of Groningen

In any case, just be happy with your choices!

4

Actions Research

Leaving academia :(

Björn Lellmann
SBA Research

Lara Spendier
OBB

Vivek Nigam
HUAWEI

But always carrying the logical background :)

4

Actions Research

When academia and industry meets to talk

Academic research applied to the industrial setting

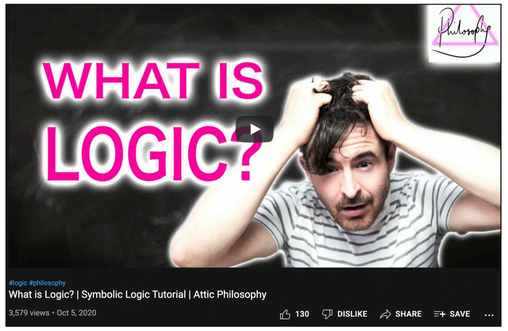
Peter O'Hearn

Static program analysis at UCL + FB/Lacework

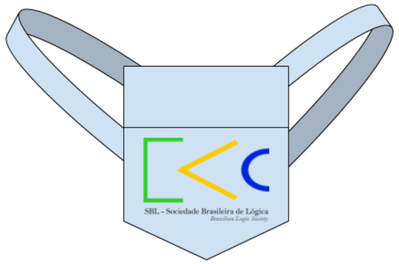
4

Actions Research

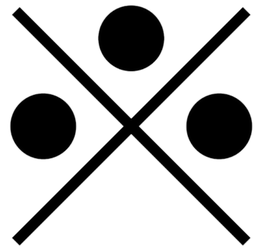
Concrete actions!!!



Attic Philosophy
Mark Jago

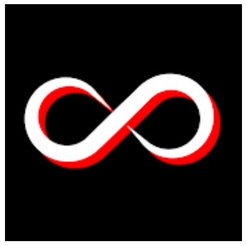


Lógicos em quarentena
Bruno Lopes



Lógica MX
María Martinez-Ordaz et al.

Coletivo Lógica Viva
Marcos Silva et al.



Canal Ad Infinitum
Rodrigo Freire & Edgar Almeida

The Nordic Online Logic Seminar

The Proof Society

The Logic Supergroup

Australasian Association for Logic

The professional organisation for logicians in Australia and New Zealand, est. 1965

. . .

The difficult art of communicating logic!!

4

Actions Research

Concrete actions!!!

Mauricio Ayala-Rincón
UnB

Daniele Nantes

Daniel Ventura

Delia Kesner
Université de Paris

Maribel Fernandez
King's College London

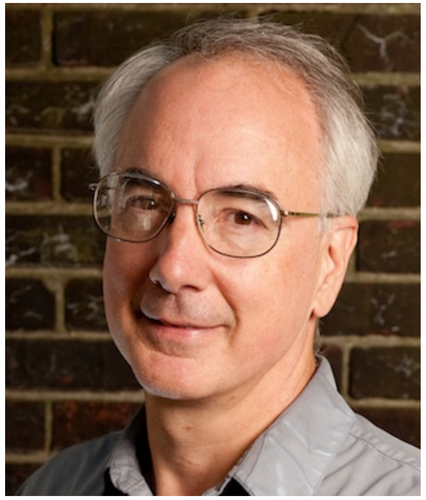
Internationalization/cooperation

4

Actions Research

Concrete actions!!!

Carlos Olarte
Université Sorbonne Paris Nord



Dale Miller
Inria Saclay - Île-de-France

Giselle Reis
CMU-Qatar

Luiz Carlos Pereira
PUC-Rio/UERJ

Build international cooperation with friends!

4

Actions Research

Concrete actions!!!

If you are in an underrepresented country/group:

- try to start international collaborations
- send your students abroad!
- start seminars, involve the community...

4

Actions Research

Concrete actions!!!

If you are in an underrepresented country/group:

- try to start international collaborations
- send your students abroad!
- start seminars, involve the community…

If you are in a strong/established group:

- open space to underrepresented groups
- propose multi-regional projects
- open places for foreign students

Questions?

Credit: www