# CDT in Designing Responsible NLP Student Briefing

Frank Keller CDT Training Director School of Informatics University of Edinburgh

Designing Responsible Natural Language Processing

#### A Warm Welcome to our New CDT Cohort!



## What is a CDT? What is the CDT in Designing Responsible NLP?

- CDT = Centre for Doctoral Training.
- In a nutshell: a large training grant for 10–14 students per year.
- Combines research and training over 4 years.
- Students learn together in cohorts ....
- ... but not in a silo: CDTs should bring together a broader community (incl. academic, industry, public).
- emphasis on equality, diversity, and inclusion.
- CDT in Designing Responsible NLP is one of 12 AI CDTs across the UK.
- partnership between Informatics, ECA, PPLS, Law, and EFI.
- Scope: NLP and its design, social, ethical, and legal aspects

When they applied, each student associated themselves with one or more **skills domains** with the CDT:

- Responsible NLP data and models;
- Explainable NLP for users in-the-world;
- Designing for human-AI partnerships;
- Governance and accountability;
- Co-creation and NLP future.

Diversity of student backgrounds: computer science, ethics, law, design, HCl, visualization, behavioral and social science.

#### **Crucial Activities**

- Working with **outside partners** (mostly from industry, but also public sector, charities, other universities)
- Internships and placements.
- Public engagement activities.
- Entrepreneurship training with Bayes Centre, CodeBase, TechCrunch, El.
- Regular workshops on AI ethics.
- Visiting researchers from global majority countries.
- Participation of aligned students from outside the CDT.
- Students expected to help with programme delivery after year 1: work as teaching assistants, tutors, etc.

## CDT in Designing Responsible NLP: Who are We?

- John Vines, Director
- Ewa Luger, Co-Director and EFI Lead
- Mirella Lapata, Co-Director
- Frank Keller, Training Director
- Nicola Osborne, Partnerships and ED&I Lead
- Ivan Titov, Informatics Lead
- Melissa Terras, ECA Lead
- Catherine Lai, PPLS Lead and Pastoral Lead
- Lachlan Urquhart, Law Lead
- Daniel Shorr, Business Development Manager
- Stefania Pasare, CDT Manager
- Yolanda Shumba, CDT Administrator

- CDT/ILCC Seminars: one or more per month
- Distinguished Lectures: two per year
- Partner Summit: one a year
- Language Lunches: alternate months, student-run, jointly with PPLS
- Student Rep Meetings: 1-3 per semester
- Firbush Team Building Trips: Autumn and Spring
- Cross CDT Events: joint with the other four CDTs in the school
- Your own event: we have funds available for student-led events!

Student Wellbeing Services: Chaplaincy, Counselling, Disability Service



student groups, societies, meetups

Doctoral College: training and support for PhD students across the university

- Raise any concerns with supervisor, cohort peers, buddies, CDT pastoral lead, student reps.
- Acknowledge the diversity of the people who attend UoE/Informatics/CDT:
  - EUSA Campaigns
  - Respect at Edinburgh
  - Edinburgh Race Equality Network
  - Staff Pride Network
  - Disability and Learning Support Service
- Don't be afraid to ask for help!
- CDT Slack (run by students for students).

# Programme Structure

- PhD with Integrated Training
- 4 years: 75% research, 25% taught
- Students select courses to complement their training
- Students take 180 course credits over two years.
- The following courses are compulsory:

Year 1							
Researching Responsible and Trustworthy NLP	[20 credits]						
Applied Interdisciplinary Project	[20 credits]						
Individual Exploratory Project	[60 credits]						
A course on AI ethics (many choices)	[10 credits]						
Year 2							
Case Studies in Responsible NLP	[10 credits]						

• This leaves a choice of 60 course credits.

The 60 credits of optional courses need to span at least two specialist areas:

- 1. Responsible and Explainable NLP Data and Models
- 2. Designing for Human-AI partnership
- 3. Governance and Accountability
- 4. Co-Creation and NLP futures
- 5. Entrepreneurship

Note that these are closely aligned with the CDT application domains.

You will find a list of all the courses in each specialist area in the CDT Degree Program Table.

More information on program structure and course selection in the CDT Handbook.

- Meet with John and your supervisor in welcome week.
- Discuss Training Needs Analysis (TNA) and course selection with them.
- Submit your TNA form and course selection form.

Please submit TNA and course selection forms by 12 September, 10am

- Changes to your course selection are possible, but only until the end of week 2 of the semester the course is in.
- Again, discuss changes with your supervisor.
- Don't submit a new form, but email Stefania your changes.

#### A Couple More Things about Courses

- Types of courses: Level 9, Level 10, and Level 11.
- Courses are 20 credits or 10 credits (only exception: Individual Exploratory Project).
- You can take at most 30 credits of courses at level 9 or 10; all other courses have to be at level 11 (master's degree level).
- The Degree Programme Table specifies the official requirements and lists specialist courses.
- In addition to specialist courses, you can freely choose up to 20 credits per year from any School;
- Not all courses are offered every year.
- Use the PATH Tool to help with course selection and generate your timetable.

What do you do if your favorite course is not listed in the DPT?

- Check if you can fit it in as optional course.
- Alternatively: get permission to substitute a course in the DPT with another suitable course.
- This is called a concession.
- Discuss this with your supervisor first, then apply to Stefania for a concession; teaching coordinator decides.

- Students are strongly encouraged to select a broad set of courses that complements their background.
- Aim for a course load of 120–140 credits in year 1.
- Try to balance courses equally across the two semesters; bear in mind that Researching Responsible and Trustworthy NLP (NLP-RR) spans both semesters.
- Though an overload in semester 2 is ok (because IEP is 60 credits).
- You also need to leave time to work on your PhD!
- You are not normally allowed to go on internships or on holiday while you're taking courses. (Short absences are fine.)

- Each year, there is an annual review: you submit a report on your PhD research so far, which is then assessed by a committee.
- The review covers research, course performance and broader CDT involvement.
- Students in year 2 or higher also give a presentation as part of their annual review (talk or poster); typically part of a larger CDT event.
- Whether you progress to the next year depends on your course marks and on the outcome of the annual review.
- Full guidance on the annual review will be issued to students and supervisors in late spring.

In a given year, in order to progress to the next year, a student needs to:

- pass all compulsory taught courses taken with a mark of at least 50; and
- pass at least 2/3 of all taught credits taken with a mark of at least 50 in each of the courses which make up these credits; and
- attain an average of at least 50 across all taught credits taken in this year; and
- be awarded a grade of at least "good" by the annual review panel in the annual review for this year.

No resits are allowed (unless there are exceptional circumstances). Students who do not meet the progression criteria may be able to register for a different degree (e.g., MSc by research).

If you experience exceptional circumstances (illness, etc.), talk to supervisor, CDT pastoral lead, or graduate school.

# **Skills Development and Additional Training**

**The Institute of Academic Development** (IAD) offers a large programme of PhD training courses (not for credit), e.g.:

- Managing Your Research Project,
- Effective Conference Posters
- Collaborative Writing and Publishing
- Social Media: Sharing, Connecting and Building an Audience

#### We are currently finalising a CDT-specific skills development programme:

- research impact (Fasttrack Impact)
- career planning
- presentation and writing (e.g., VOX coaching)
- entrepreneurship (PhD Max, Techscaler, CodeBase)

#### We'd like your input to shape this programme.

The School of Informatics offers subject-specific PhD training courses, e.g.:

- How to do an Informatics PhD
- Preparing For 1st Year Review
- Informatics PhD Thesis Workshop
- Preparing for your Viva

When you do your TNA, you should discuss with your supervisor which skills you want to develop and which courses would be suitable.

Student reps:

- Select your reps by 30 September. Stefania will explain.
- Ask reps of predecessor CDT what this entails.

Computing: CDT students have access to:

- Informatics GPU cluster, currently around 200 GPUs
- EIDF GPU Cluster, 351 GPUs, a university-level facility run by EPCC
- Eddie compute cluster, 34 GPUs, a university-level facility run by IS
- there will be an intro to cluster computing in NLP-RR

Research training support grant (RTSG):

- each student has a generous budget to spend on conferences, summer schools, research expenses, small items of equipment
- Stefania will explain the application process

What about marking criteria? Who do I complain to? What if I need an extension? What if I have exceptional circumstances? What if I need to withdraw? What about computing? Who pays for my travel?



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It's all in the CDT Handbook!

#### **More Welcome Activities**

# Your CDT Welcome Week Schedule 09/17th September 2024

Designing Responsible Natural Language Processing

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MONDAY, 9TH SEP	TUESDAY, 10TH SEP	WEDNESDAY, 11TH SEP	THURSDAY, 12TH SEP	FRIDAY, 13TH SEP	MONDAY, 16TH SEP	TUESDAY, 17TH SEP
Welcome by CDT Director	TNAs AND Pick up IT equipment	CDT Induction Day	Electives Course selection	Group activity	Photoshoot and networking lunch	Informatics Graduate School Induction Day
10.30-2 pm	Different times	Starts at 9.30 am, full day	Via Microsoft Form, by 10 am	Information to be circulated	Different times, lunch provided from 11.30 am	10- 2 pm, lunch included
Meet at EFI Main reception	Informatics Forum	EFI, room 1.55	Microsoft Forms	In-person	Informatics Forum, G.07	Informatics Forum, G.07
Welcome to the programme from the Director, John Vines and visits to EFI and Informatics Forum, Meet your peers.	Individual discussions and TNAs attended by John Vines and your primary supervisors; this will inform your course	We will officially welcome you to the CDT community and provide essential information for a successful doctoral journey.	Please complete the elective course selections, as agreed upon discussion with your supervisor.	This is an opportunity to know your peers better and collaborate on a group activity, as set by the Director of the CDT, John Vines.	Individual head shots of our students and Management team. Joint event with MLS and AI4BI CDTs.	Get to know your Graduate School, with welcome addresses from our Head of School and Directors.

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- TNA form and course selection from to Stefania by 12 September, 10am for upload on Euclid.
- 30 September: select student reps
- October: first student rep meeting
- November: Firbush trip
- April: CDT Science Festival
- June: Partner Summit

