



The Conversational Intelligence Challenge

NIPS 2017 Live Competition



McGill



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NIPS 2017 Live Competition

Schedule

01:30 PM - 01:45 PM Introduction by the competition chairs, presentation of the challenge, its design, obtained results.

01:45 PM - 01:50 PM Awarding prize.

01:50 PM - 02:00 PM Short presentation by winning team.

02:00 PM - 02:30 PM Inspirational talk by [Alexander Rudnicky](#)

02:30 PM - 03:00 PM Panel discussion moderated by Julian Serban. The participants are [Alexander Rudnicky](#) (CMU), [Dilek Hakkani-Tur](#) (Google), [Jianfeng Gao](#) (MS Research) and [Joelle Pineau](#) (McGill U and FAIR).

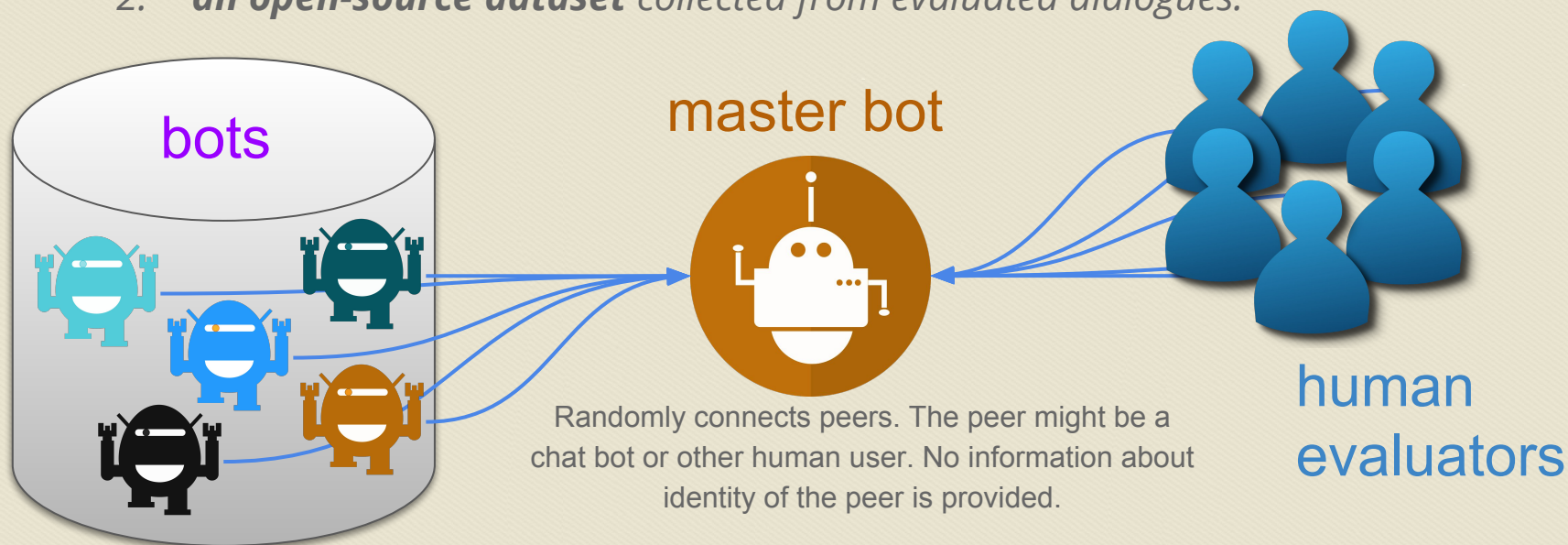
03:00 PM - 03:30 PM Coffee break + Poster session.

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We expect the competition to have two major outcomes:

- 1. evaluate **quality of state-of-the-art dialogue systems**, and*
- 2. **an open-source dataset** collected from evaluated dialogues.*





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1. Read a text
2. Talk to a peer (**human** or **bot**) about the text
3. Evaluate bot's quality:
 - a.  and  for utterances
 - b. **1** to **5** for dialogues - overall, breadth and engagement



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Results of Pre-NIPS Round



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Trinity
College
Dublin

The University of Dublin



THE HONG KONG
POLYTECHNIC UNIVERSITY
香港理工大學



AIBRAIN, INC.
THE INTELLIGENT COMPANY



Uniwersytet
Wrocławski

CROSSCERT

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Results of Pre-NIPS Round



	BOT	FINAL SCORE	Organisation
1	poetwannabe	2.386	University of Wroclaw
2	bot#1337	2.318	MIPT
3	RLLChatBot	2.226	McGill University
4	kAlb	2.027	KAIST, AIBrain, Crossert
5	DeepTalkHawk	1.432	Text Machine, UMass Lowell, Trinity College
6	PolyU	1.284	The Hong Kong Polytechnic University, Fudan University

Sat Dec 9th 08:00 AM -- 06:30 PM @ S1

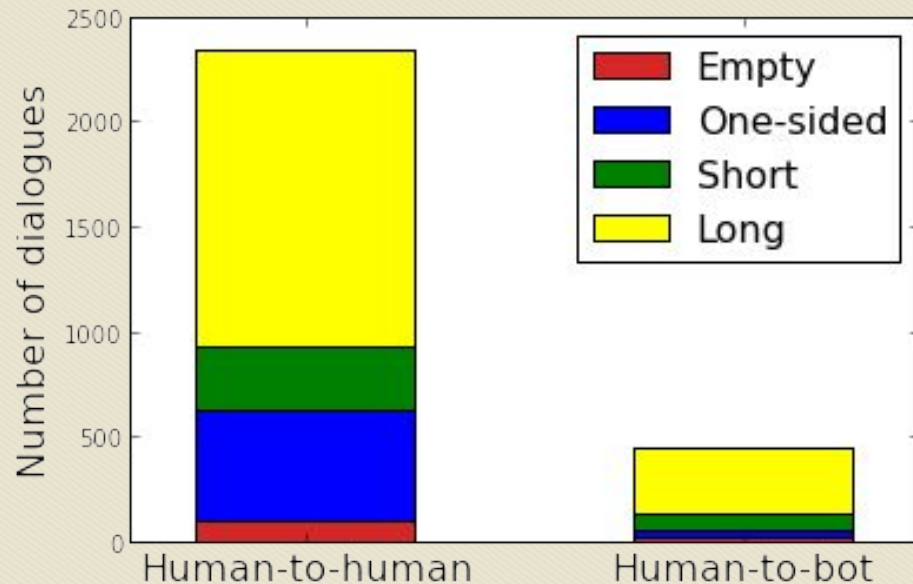
Machine Learning Challenges as a Research Tool

Isabelle Guyon · Evelyne Viegas · Sergio Escalera · Jacob D Abernethy

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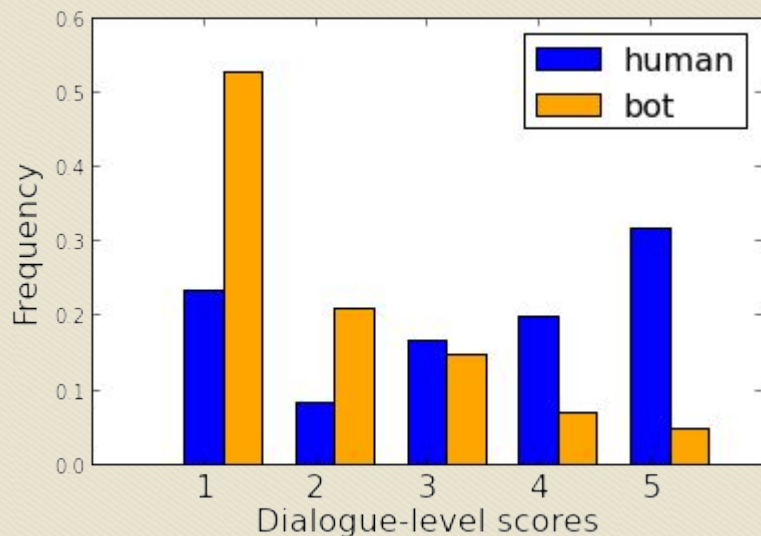
2,778 dialogues: human-to-bot (84%) and human-to-human (16%)



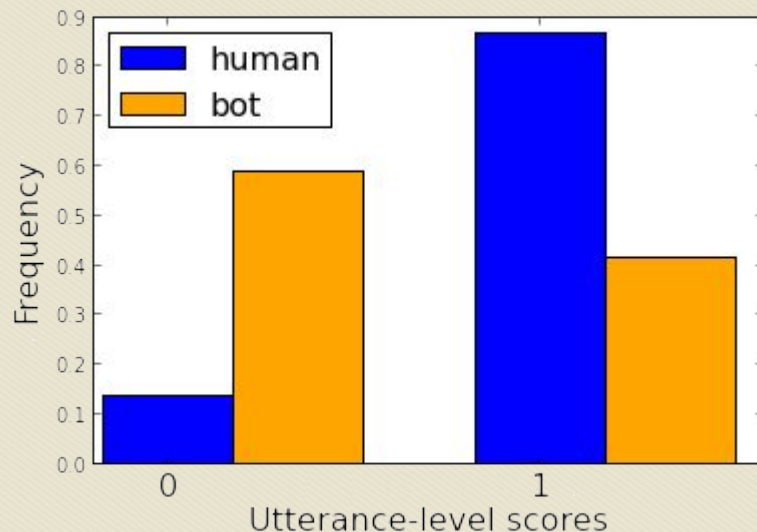
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Dialogue-level quality



Utterance-level quality



Correlation of dialogue-level and utterance-level scores: **0.6**

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Data collection insights:

- dialogue-level *quality*, *breadth* and *engagement* are correlated;
- evaluating dialogues on the fly is difficult, turns are not rated;
- paragraphs from Wikipedia are too long and usually not used for the dialogue;
- humans are irresponsible;
- humans prefer talking to bots and break dialogue when understand that peer is human.

More details and data on - <http://convai.io/data/>

https://github.com/facebookresearch/ParlAI/tree/master/parlai/tasks/convai_chitchat



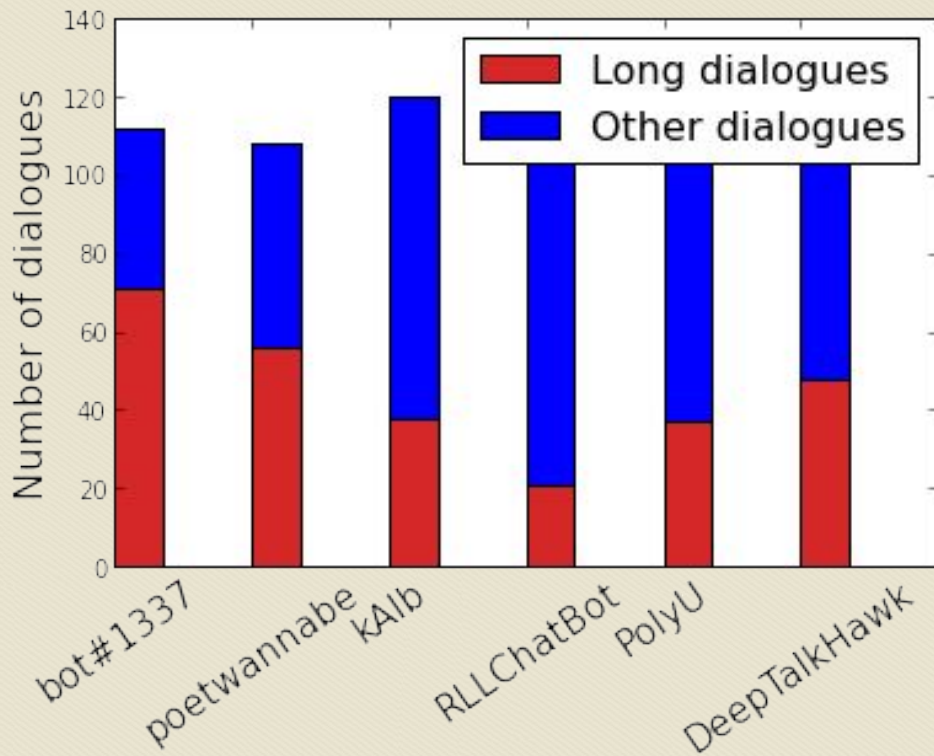
ParlAI

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NIPS data collection:

- 739 dialogues overall
- 292 long dialogues
- number of long dialogues depends on bot's quality



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Grand Conclusions

Everybody is fascinated
with Conversational AI!

Nobody wants to to spend
time chatting with bots on
irrelevant topics!

1. We should continue

2. Motivate people



ConvAI Challenge Bot
bot



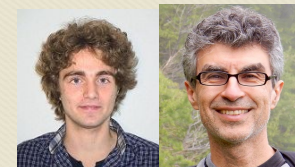
Hi! 18:32 ✓✓

How are you doing? 18:32



Great! And you? 18:32 ✓✓

I've been here seven months, not too long. 18:32



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Jan 29 - Feb 4
2018

DeepHack.Babel

/ always
in your
language /



Travel grants!!!

<http://deephack.me>

The main goal of hackathon is **semi-supervised Machine Translation**: Machine Translation which makes use not only from (often scarce) parallel data, but also from (potentially unlimited) untranslated texts in source and target languages. The participants will need to train an MT model on a very small parallel corpus and boost its performance using monolingual non-parallel data.

Timeline

- 1st December, 2017** ○ **Registration is open**
Registered teams are allowed to submit applications and solutions for the Qualification Round
- 8th January, 2018** ○ **Qualification Round is closed**
- 9th January, 2018** ○ **Notification of acceptance.**
Top of 50 participants are selected
- 29th January - 4th February, 2018** ○ **DeepHack.Babel**
A 24/7 week-long sci-hack school

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6



DeepTalkHawk

1.229

Text Machine, UMass Lowell,
Trinity College

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5



THE HONG KONG
POLYTECHNIC UNIVERSITY
香港理工大學



PolyU

1.5

The Hong Kong Polytechnic
University, Fudan University

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4



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RLLChatBot

1.905

McGill University

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3



kAlb

2.105

KAIST, AIBrain, Crossert

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1-2



Uniwersytet
Wrocławski

bot#1337

2.746

MIPT

poetwannabe

2.536

University of Wrocław