

# Richard Csaky

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## EDUCATION

### KU Leuven, Leuven, Belgium

- Artificial Intelligence M.S. Erasmus Feb 2020 – Jun 2020  
Courses: Bioinformatics, Brain Computer Interfaces, Behavioural Neuroscience, Artificial Neural Networks

### EEML, Bucharest, Romania

- Deep Learning and Reinforcement Learning [Summer School](#) Jul 2019 – Jul 2019

### Budapest University of Technology and Economics, Budapest, Hungary

- M.S. in Software Engineering Sep 2018 – Jun 2020
- B.S. in Mechatronics Engineering Sep 2014 – Jan 2018

Excellent with Highest Honours, 4.79/5 degree GPA.

Thesis: *Parking Spot Recognition and Visualization with Semantic Segmentation*.

Held electrical engineering labs as a teaching assistant for 1 semester.

Participated in a research project creating a program to simulate and experiment with protein based circuits.

## PAPERS

**Richard Csaky**, Gábor Recski. *The Gutenberg Dialogue Dataset*. Preprint 2020. ([Code](#))

**Richard Csaky**. *Proposal Towards a Personalized Knowledge-powered Self-play Based Ensemble Dialog System*. Preprint 2019.

**Richard Csaky**, Patrik Purgai, Gábor Recski. *Improving Neural Conversational Models with Entropy-Based Data Filtering*. ACL 2019. ([Code](#))

**Richard Csaky**, Gábor Recski. *Deep Learning Based Chatbot Models*. TDK 2017. ([Code](#))

Edvárd Bayer, **Richard Csaky**, Balázs Rakos. *Study of dipole-dipole coupled protein-based circuits using self-developed simulation software*. TDK 2016. ([Code](#))

## EXPERIENCE

### Department of Automation and Applied Informatics, Budapest, Hungary

- NLP Researcher Feb 2018 – Oct 2019  
Supervised several students on project ranging from neural machine translation to RL chatbots ([1](#), [2](#), [3](#), [4](#)).  
Wrote a detailed [research proposal](#) and applied to the Amazon Alexa prize with this team.  
Won first place in a national competition with a literature review paper of 150 papers in dialogue modeling.  
Worked on improving open-domain neural chatbots by data-filtering, and presented results at ACL 2019.  
Built a new, large, high-quality dialogue dataset based on books from Project Gutenberg.

### Robert Bosch GmbH, Budapest, Hungary

- Software Engineer, Driver Assistant Division Jul 2017 – Aug 2018  
Applied semantic segmentation models to parking space segmentation.  
Built a user interface, and with the help of a test driver, gathered 10.000 labeled images. Parking spots projected to the ground could be manipulated on the live video of a car camera. Trained YOLO on this dataset achieving impressive results that convinced the department to give further funding to the project.

### Budapest Cultural Center, Budapest, Hungary

- Informatics Lecturer Oct 2012 – May 2013  
Taught older people how to use the internet and useful websites like facebook, gmail, google and others.

## AWARDS

- 3rd place at the Scientific Students' Associations Conference ([paper](#)) Nov 2019
- Selected for the National Excellence Program (scholarship) Aug 2019
- 1st place at the National Scientific Students' Associations Conference ([paper](#)) Apr 2019
- 1st place at the Scientific Students' Associations Conference ([paper](#)) Nov 2017
- 2nd place at the Scientific Students' Associations Conference ([paper](#)) Nov 2016

## TALKS AND POSTERS

### Improving Neural Conversational Models with Entropy-Based Data Filtering

- EurNLP ([poster](#)) Oct 2019
- NLP for ConvAI workshop @ ACL ([poster](#)) Aug 2019
- ACL 2019 ([talk](#)) Jul 2019
- EEML ([poster](#)) Jul 2019
- RAAI ([poster](#)) Jun 2019

### Deep Learning Based Chatbot Models

- Hungarian NLP Meetup ([slides](#)) May 2019

## LANGUAGES

Hungarian, Romanian: Native language

English: C1 level (TOEFL iBT: 117/120)

French: B2 level (Advanced level high school final exam)

## **SKILLS**

Mathematica, Inventor, NI LabView, Ansys, R || *studied during 1 semester*

C/C++/C#, Python, Java, Matlab || *studied during 2-3 semesters, used in projects*

OpenGL, TensorFlow, PyTorch, Processing, LaTeX, Git || *self-taught, used in projects*