

# OANA IGNAT

Interested in applying science to help create a better world

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🔗 <https://oanaignat.github.io/>

📍 Ann Arbor, MI, USA



## EDUCATION

Ph.D. Candidate

University of Michigan, Ann Arbor, USA

📅 09/2017 - 07/2022 (expected)

- Research on **multimodal (text & video)** applications, with a focus on human action detection in social media vlogs (videos with speech)
- Advised by **Rada Mihalcea**
- Member of the **Language and Information Technologies** and **Vision & Learning Labs**
- Member of the **Center for Research on Learning and Teaching in Engineering**
- Organizer of the **NLP Reading Group**

B.S. Computer Science

Babes-Bolyai University, Cluj Napoca, Romania

📅 10/2013 - 07/2016

- Collaborated with Robert-Bosch SRL for my **undergraduate thesis**, which won multiple prizes and was successfully applied in real-world applications.
- Won the **Best Thesis award in Artificial Intelligence** for the entire class of 2016 undergraduate and graduate students.

## INDUSTRY EXPERIENCE

Research Intern

Facebook (FAIAR)

📅 05/2020 - 08/2020

📍 Remote

- Mentored by **Alon Halevy**, **Jane Yu** and **Y-Lan Boureau**.
- **Identifying and Analyzing Inspiration** in social media data

Image Processing Engineer

Telenav Software

📅 08/2016 - 08/2017

📍 Cluj Napoca, Romania

- **3D reconstruction of scenes** using structure from motion.

Intern Image Processing Engineer

Robert-Bosch SRL

📅 07/2015 - 08/2016

📍 Cluj Napoca, Romania

- Novel road detection algorithm using a **stereo-camera**.
- Daimler AG applied my work to speed up their road detection algorithms.

## AWARDS



Best Poster award in Eastern European Machine Learning summer school (EEML), July 6th, 2019



2017-2018 Fulbright Student Award Finalist



Best Thesis award in Artificial Intelligence for the entire class of 2016 graduates at the "Babes-Bolyai" University, Cluj-Napoca. Awarded by the Romanian Institute of Science and Technology, July 1, 2016



"Scientific Communication Sessions for Students" Cluj-Napoca, June 16, 2016 – Second place



2016 Jane Street "Women in STEM" Finalist



Over the years I took part in over 60 Mathematics competitions, such as:

- National competition in Mathematics "Euclid" 2013 – 1st prize
- National Olympiad in Mathematics 2012
- Regional Mathematics Olympiad 2012 – 1st place
- Regional Mathematics Olympiad 2011 – 2nd place
- National competition in Mathematics "Euclid" 2011 – 2nd prize
- Regional Mathematics Olympiad 2010 – mention
- Regional Mathematics Olympiad 2009 – 2nd place

## PUBLICATIONS

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### Identifying Visible Actions in Lifestyle Vlogs

**Annual Meeting of the Association for Computational Linguistics (ACL)**

Oana Ignat, Laura Burdick, Jia Deng, Rada Mihalcea

📅 07/2019 🔗 <https://www.aclweb.org/anthology/P191643>

I built a **dataset** and methods for **detecting visible human activities** from transcribed YouTube videos.

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### Disparity image segmentation for free-space detection

**IEEE 12th International Conference on Intelligent Computer Communication and Processing (ICCP)**

Oana Ignat, Cosmin Lazar

📅 08/2016 🔗 <https://ieeexplore.ieee.org/document/7737150/>

I applied a **time-series segmentation method**, previously used in the medical field for measuring electro-cardiograms, in a completely different field and application: **detecting the road from depth images**, to enable autonomous driving.

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## TEACHING ACTIVITIES

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### Engineering Teaching Consultant (ETC)

**The Center for Research on Learning and Teaching in Engineering (CRLT-Engin)**

📅 09/2020 - Ongoing 📍 Remote

I **help other GSIs/IAs to improve their teaching** through one-on-one consultations where we discuss challenges they face during teaching. I also collect **feedback from students** of the GSIs/IAs and **discuss it with the student instructor**.

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### Graduate Student Instructor

**EECS 281: Data Structures and Algorithms**

📅 09/2020 - 12/2020 📍 Remote

**EECS 476: Data Mining**

📅 01/2020 - 05/2020 📍 University of Michigan

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### Teach AI for Social Good

**AI4ALL**

📅 07/2019 📍 University of Michigan

Introduced **underrepresented minority high school students** to AI by teaching them how to code in Python and implement an NLP project related to **social good**: work with HappyDB dataset to predict what makes people happy.

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### Teach Math and English

**Hometown library**

📅 2013 📍 Botosani, Romania

Taught beginner and intermediate level Math and English to high school students in my home town, while being a high school student.

## VOLUNTEERING

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### Organizer

**University NLP Reading Group**

📅 08/2019 - Ongoing

🔗 [lit.eecs.umich.edu/reading\\_group.html](http://lit.eecs.umich.edu/reading_group.html)

Weekly **NLP reading groups** for the University of Michigan students from the CSE, EECS and School of Information.

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### Student Mentor

**Michigan Islamic Academy's Senior Project**

📅 09/2019 - 11/2019

Biweekly meetings with a senior student to guide her through her final NLP project, a project related to **diversity and mental health**.

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### Student Volunteer

**Annual Conference of the North American Chapter of the Association for Computational Linguistics (NAACL)**

📅 06/2019

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### Plant trees

**Robert-Bosch Green Week**

📅 06/2017

Planted 30+ trees in a deforested region

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### Student Society Member

**Babes-Bolyai University**

📅 2013-2015 📍 Cluj Napoca, Romania

Participated in projects like: "Careers in IT", "The Week of Informatics and Mathematics students", where I introduced students from other counties to the rich history of Cluj through **team building activities**.

## TEACHING WORKSHOPS ATTENDED, BY CRLT-ENGINE

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Designing and Facilitating Group Work in Remote Courses

It's Time for Action: Generating an Active Learning Plan

The Science of Learning

How Stereotype Threat, Impostor Syndrome, and Growth Mindset Affect Student Learning

Writing and Grading Multiple Choice Exams: An Online Workshop

## UNIVERSITY GRADUATE COURSES

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ENTR 550: Interpersonal Skills: Leveling Up to Leadership	📅 Winter 2021
ELI 621: Dissertation Writing and Writing for Publication	📅 Winter 2021
EECS 692: Advanced Artificial Intelligence	📅 Winter 2019
EECS 592: Foundations of Artificial Intelligence	📅 Winter 2018
EECS 551: Matrix Methods for Signal Processing	📅 Winter 2018
EECS 595: Natural Language Processing	📅 Fall 2017
EECS 542: Advanced Topics in Computer Vision	📅 Fall 2017

## INDEPENDENT COURSEWORK, FROM COURSERA

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Data Science Ethics	by H.V. Jagadish, University of Michigan	📅 Winter 2021
The Science of Well-Being	by Laurie Santos, Yale University	📅 Summer 2020
Machine Learning	by Andrew Ng, Stanford University	📅 2017
Image and Video Processing	by Guillermo Sapiro, Duke University	📅 2016

## CONFERENCES ATTENDED

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Annual Meeting of the Association for Computational Linguistics (ACL)	📅 2019, 2020
Eastern European Machine Learning summer school (EEML)	📅 2019, 2020
North American Chapter of the Association for Computational Linguistics (NAACL)	📅 2019
International Conference on Computational Linguistics (COLING)	📅 2018
Midwest Speech and Language Days (MSLD)	📅 2018, 2019

## PROGRAMMING SKILLS

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Python/ SciPy/ Numpy	Keras/ Pytorch/ Tensorflow	LaTeX/ Overleaf	Matlab/ Octave				
MySQL/ Presto	HTML	CSS	JavaScript	PHP	C++	OpenCV	Hadoop/ MapReduce
Java	C#	LISP	Prolog				

## LANGUAGES

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Romanian	Native	● ● ● ● ●
English	Fluent	● ● ● ● ●
French	Intermediate	● ● ● ● ●
German	Beginner	● ● ● ● ●
Spanish	Beginner	● ● ● ● ●