

Nora Horanyi

PH.D. CANDIDATE

✉ horanyinora@gmail.com | 🌐 https://horanyinora.github.io/ | 🔗 horanyinora | in nora-horanyi



Education

Ph.D. in Computer Science

INTELLIGENT ROBOTICS LABORATORY, SCHOOL OF COMPUTER SCIENCE, UNIVERSITY OF BIRMINGHAM

Birmingham, UK

2018-present

- **Thesis topic:** Human attention target estimation and application on images

M.Sc. in Info-Bionics Engineering

FACULTY OF SCIENCE AND INFORMATICS, UNIVERSITY OF SZEGED

Szeged, Hungary

2016-2018

- **Thesis title:** Absolute pose estimation using 3D-2D line correspondences and vertical direction — *Excellent with institutional award*
- **Final grade:** 4.88/5

B.Sc. in Molecular Bionics Engineering

FACULTY OF SCIENCE AND INFORMATICS, UNIVERSITY OF SZEGED

Szeged, Hungary

2012-2016

- **Thesis title:** Measurement of electric surface charge on cultured brain endothelial cells — *Excellent with national awards*
- **Final grade:** 3.97/5

Specialized Mathematics class

SÁGVÁRI ENDRE GRAMMAR SCHOOL, SZEGED, HUNGARY

Szeged, Hungary

2008-2012

- **Final grade:** 4.8/5

Experience

Research Assistant

SCHOOL OF COMPUTER SCIENCE, UNIVERSITY OF BIRMINGHAM

Birmingham, UK

Aug. 2021 - present

- Research project with the Korea Electronics Technology Institute
- Supervisor: Dr. Hyung Jin Chang

Teaching Assistant

SCHOOL OF COMPUTER SCIENCE, UNIVERSITY OF BIRMINGHAM

Birmingham, UK

2018 - present

- Courses: Mathematical Foundations of Computer Science, Robot Vision, Computer Vision and Imaging

Research Associate

CHAIR OF COMPUTER GRAPHICS AND VISUALIZATION, TECHNICAL UNIVERSITY OF DRESDEN

Dresden, Germany

Jan. 2018 - June 2018

- NeuroFusion project
- Supervisor: Prof. Dr. rer. nat. Stefan Gumhold

Student researcher

RESEARCH CENTER FOR AUTOMATIC CONTROL OF NANCY, UNIVERSITY OF LORRAINE

Nancy, France

Apr. 2017 - May 2017

- NETASSIST project
- Supervisor: Constantin Morărescu

Student researcher

RESEARCH GROUP ON VISUAL COMPUTATION, UNIVERSITY OF SZEGED

Szeged, Hungary

2016 - 2018

- Master's thesis project
- Traffic Object Detection and Registration with Stereo Imaging System project
- Supervisor: Prof. Zoltan Kato

Student researcher

BIOMOLECULAR ELECTRONICS RESEARCH GROUP, BIOLOGICAL RESEARCH CENTRE, HAS

Szeged, Hungary

2014 - 2016

- Integrated, microfluidical biochip development project
- Supervisors: Dr. Andras Der and Dr. Andras Kincses

Student researcher

MOLECULAR NEUROBIOLOGY LABORATORY, INSTITUTE OF BIOPHYSICS, BIOLOGICAL RESEARCH CENTRE, HAS

Szeged, Hungary

2013 - 2016

- Bachelor's thesis project
- Supervisors: Dr. Maria Deli and Dr. Fruzsina Walter

Publications

- 2022 [Nora Horanyi](#), Kedi Xia, Kwang Moo Yi, Abhishake Kumar Bojja, Ales Leonardis, Hyung Jin Chang
TP-AE: Temporally Primed 6D Object Pose Tracking with Auto-Encoders .
In Proceedings of Conference on Robotics and Automation (ICRA), IEEE
- 2021 Linfang Zheng, Ales Leonardis, Tze Ho Elden Tse, [Nora Horanyi](#), Hua Chen, Wei Zhang, Hyung Jin Chang
Repurposing Existing Deep Networks for Caption and Aesthetic-Guided Image Cropping.
In Proceedings of Pattern Recognition, Elsevier
- 2020 Andras Kincses, Ana R. Santa-Maria, Fruzsina R. Walter, Laszlo Der, [Nora Horanyi](#), Dora V. Lipka, Sandor Valkai, Maria A. Deli, and Andras Der
A chip device to determine surface charge properties of confluent cell monolayers by measuring streaming potential.
In Proceedings of Lab on a chip, Royal Society of Chemistry
- 2017 [Nora Horanyi](#), Zoltan Kato
Multiview Absolute Pose Using 3D - 2D Perspective Line Correspondences and Vertical Direction.
In Proceedings of the ICCV Workshop on Multiview Relationships in 3D Data, IEEE
- 2017 [Nora Horanyi](#), Zoltan Kato
Generalized Pose Estimation from Line Correspondences with Known Vertical Direction.
In Proceedings of International Conference on 3D Vision, IEEE

Honors & Awards

- 2019 **Best presentation award**, Research skills module, EPS, University of Birmingham *Birmingham, UK*
- 2017 **1st prize & Outstanding research Morgan Stanley award - oral presentation**, Computer Science section, Local competition round, National Scientific Students' Associations Conference *Szeged, Hungary*
- 2017 **Honor of the Dean of the University of Szeged**, Achievements in the National Scientific Students' Associations Conferences *Szeged, Hungary*
- 2017 **3rd prize - oral presentation**, Biology section (Animal Pshysiology), National competition round, National Scientific Students' Associations Conference *Debrecen, Hungary*
- 2016 **2nd prize - oral presentation**, Biology section (Animal Pshysiology), Local competition round, National Scientific Students' Associations Conference *Szeged, Hungary*
- 2016 **2nd prize - Image processing project competition**, Summer School on Image Processing *Szeged, Hungary*

Scholarships & Grants

- 2018 **Ph.D. studentship**, School of Computer Science, University of Birmingham *Birmingham, UK*
- 2018 **Morgan Stanley scholarship**, Outstanding research performance in TDK conference *Szeged, Hungary*
- 2017 **Research scholarship**, Institute of Informatics, University of Szeged *Szeged, Hungary*
- 2012-2018 **Hungarian Governmental Scholarship**, Scholarship for Higher Education for outstanding GPA *Hungary*

Training

- International Computer Vision Summer School** *Punta Sampieri, Ragusa, Sicili*
ICVSS 2020
- Drone School and Workshops - Deep learning and Computer vision for drone imaging and cinematography** *Thessaloniki, Greece*
ARTIFICIAL INTELLIGENCE AND INFORMATION ANALYSIS LAB, ARISTOTLE UNIVERSITY OF THESSALONIKI, GREECE 2018
- Vision and Sports Summer School** *Prague, Czech Republic*
CZECH TECHNICAL UNIVERSITY, CZECH REPUBLIC 2017
- Summer School on Image Processing** *Szeged, Hungary*
UNIVERSITY OF SZEGED, HUNGARY 2016
- Advanced Spring School for Students in Biology** *Budapest, Hungary*
EOTVOS LORAND UNIVERSITY, HUNGARY 2015
- Advanced Summer School for Students in Medicine and Physics** *Szeged, Hungary*
UNIVERSITY OF SZEGED, HUNGARY 2015

Skills

Languages	English proficient, Hungarian native, German pre-intermediate
Programming	Python, MATLAB, C, R, Maple
Licenses	B2 driving license, European Computer Driving Licence Certificate
Other	Team spirit, Ability to cooperate, Open-minded, Creativity, Logical thinking, Hard-working, Goal oriented

Other Activities

Girls in STEM Day workshop organization

INTELLIGENT ROBOTICS LABORATORY, SCHOOL OF COMPUTER SCIENCE, UNIVERSITY OF BIRMINGHAM

Birmingham, UK

2019

Mini and summer projects supervision of MSc students in Computer Science

INTELLIGENT ROBOTICS LABORATORY, SCHOOL OF COMPUTER SCIENCE, UNIVERSITY OF BIRMINGHAM

Birmingham, UK

2018-present

Teaching Calculus and Mathematics for fellow graduate and grammar school students

Szeged, Hungary

2013-2017

Organization and presentation at the Girls in ICT event

FACULTY OF SCIENCE AND INFORMATICS, UNIVERSITY OF SZEGED

Szeged, Hungary

2016

International Mentor of the Stipendium Hungaricum foreigner students

UNIVERSITY OF SZEGED

Szeged, Hungary

2015-2016

Organization and laboratory presentation at the National Researcher's Night

BIOLOGICAL RESEARCH CENTRE, HAS

Szeged, Hungary

2013-2016

Organization of the annual Brain Awareness Week

BIOLOGICAL RESEARCH CENTRE, HAS

Szeged, Hungary

2013-2016