# Karthikeya Ramesh Kaushik

## Personal information


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|---|---|
| Address | Groesbeeksedwarsweg 39-1,6521DA Nijmegen |
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| Email | karthikeya.kaushik@gmail.com |
| Website | karthikeyakaushik.github.io |
| Nationality | Indian |
| Date of birth | 01.08.1995 |
| Gender | Male |


## Education

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| Graduate Education | Technical University of Munich |
| (M.Sc) | Major - Computational Science and Engineering |
| | GPA - 1.9 (best 1.0, min 4.0) |
| | Thesis - Modelling Compositionality and Structure Dependence in Natural Language |
| Undergraduate Education | Sri Jayachamarajendra College of Engineering (SJCE), Mysore. |
| (B.E) | Major - Electronics and Communications Engineering |
| | GPA - 9.03 (max 10.0, min 5.0) |
| | Bachelor thesis - Text to Speech synthesiser using CMU Festvox for Indic languages in collaboration with Hear2Read. |
| Pre-University | Sadvidya Composite Pre-University College,Mysore. |
| | Aggregate - 97% |

## Academic Projects and Publications

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| Jan, 2020 - Present | Formalising Compositionality and Structure Dependence in Natural language, and implementation in the Discover of Relations by Analogy model (DORA). |
| Mar 2020 - Present | Are the opinions of professional critics more informative than those of amateurs? *in prep* |
| Mar 2020 - Present | Mapping hidden layer activity of RNNs and neuronal response to linguistic structure. *in prep* |
| Jun 2020 - Present | Crowdsourcing the assessment of wine quality *in prep* |
| Mar 2020 - Jun 2020 | Cas Coopmans, Helen de Hoop Karthikeya Kaushik, Peter Hagoort, Andrea Martin "Hierarchy vs. linearity in human language interpretation", Cognition, under review. |
| Aug, 2019 - Jan 2020 | Social strategies for wine taste prediction. Accepted to AAWE 2021, Verona |
| Apr, 2018 - Oct, 2018 | Development and locomotion of a bio-snake robot using Spiking Neural Networks (Praktikum offered by the Chair of Robotics, AI and Real time systems) |
| Oct, 2017 - Feb, 2018 | "Machine learning for GO", a Go playing bot using machine learning tools for 9*9 board. (Part of TUM Data Innovation lab) |
| Feb, 2017 - May, 2017 | Deeksha M R, Karthikeya Kaushik, Shreekanth R, "A Novel Data Independent Approach for Conversion of Hand Punched Kannada Braille Script to Text and Speech" Int J Image Graph, 2018 http://dx.doi.org/10.1142/S0219467818500109) |
| Sep, 2016 - May, 2017 | Text to speech synthesiser for the Indic languages |
| Sep, 2015 - Jul, 2016 | CoRe NITRO-GEN, PACE annual conference, Cincinnati, Ohio, 2016. |

## Internships and Student jobs

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| October 2020 - present | Working as a full time Research Assistant at the Donders Center for Cognitive Neuroimaging (DCCN), Nijmegen, with Dr. Andrea Martin, on cognitive models of language comprehension. |
| Aug 2019 - Present | Working as a Research Assistant at the LMU in the Crowd Cognition lab with Dr. Bahador Bahrami and group, on social networks in matters of taste. |
| Jan 2020 - Sep 2020 | Worked as an intern at the Max Planck for Psycholinguistics in Nijmegen, with Dr. Andrea Martin as part of Master's thesis (Erasmus praktikum grant). |
| Mar 2019 - Jul 2019 | Worked as a student intern at BMW XWorks in a project to derive semantic scene understanding for Virtual Reality applications. |
| Feb 2018 - Feb 2019 | Worked as a student researcher at Logivations Gmbh, towards Machine learning and Computer Vision solutions to logistical planning. |
| Jun - Aug, 2016 | Summer intern, at IISc, Bangalore, in the CV and AI laboratory, under Prof K R Ramakrishnan, IISc, Bangalore, on background subtraction and segmentation techniques in infrared imaging.(Indian Academy of Sciences (IASc), Summer Research fellowship programme) |

## Computer languages and tools

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| Basic | C, Protege |
| Intermediate-Advanced | Python, R, Matlab, C++ |

## Educational Training

1. Completed an online course on the basics of Matlab offered by the RheinMain University of Applied Sciences, Wiesbaden. Learnt the basics of Image processing using Matlab.(Iversity)
2. Completed an online course, "Analysis of a complex kind". Grade achieved - 85.5%(Coursera)
3. Completed an online course, "An Introduction to Interactive Programming in Python (Part 1 and 2) by Rice University on Coursera". Learnt the basics of Python, and also created interactive games in the process. Grade achieved - 77.8% and 81.7% respectively (Coursera)
3. Completed an online course, "Sequence Models". Topics include models for natural language, audio, and other sequence data. .Grade achieved - 99% (Coursera)

## Extracurriculars

1. Volunteered at Project Reachout, for one year as a high school mathematics tutor(2014-15).
2. Former editor at the SJCE Editorial Board for Jayzine, on the organising team of the annual literary fest, "Shabd"(2015-17).
3. Violinist, with a senior level proficiency in Carnatic classical music.
5. Amateur boxer, training at the ZHS, Munich.