

Dr. Efe Bozkir

CONTACT INFORMATION

Technical University of Munich
School of Social Sciences and Technology
Chair for Human-Centered Technologies for Learning
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University of Tübingen
Chair for Human-Computer Interaction
Department of Computer Science
Sand 14, 72076 Tübingen, Germany

RESEARCH INTERESTS

Extended reality (XR), Human-computer interaction (HCI), eye tracking, applied machine learning, information privacy, usable privacy and security.

CURRENT POSITIONS

Postdoctoral Researcher, Technical University of Munich April 2023 - Present
Working on extended reality, HCI, machine learning, privacy, educational technologies.
PI: Prof. Dr. Enkelejda Kasneci.

Postdoctoral Research Associate, University of Tübingen March 2022 - Present
Working on virtual reality, machine learning, privacy, eye tracking, AI in education.

RECENT PREVIOUS POSITIONS

Visiting Postdoctoral Fellow, Carnegie Mellon University August 2022 - January 2023
Worked on usable privacy & security of AR glasses at CyLab Security and Privacy Institute.
Supported by Cluster of Excellence – Machine Learning for Science.
PIs: Prof. Dr. Lorrie Cranor, Prof. Dr. Lujo Bauer.

Doctoral Researcher, University of Tübingen July 2018 - March 2022
Worked on virtual reality, machine learning, privacy, eye tracking.

IT Consultant, Netlight Consulting GmbH May 2017 - June 2018
Munich & Hamburg, Germany
Tasks: Back-end development, natural language understanding, conversational UI.

EDUCATION

University of Tübingen, Germany

Doctor of Science, Computer Science (very good, GPA: 1.0/1.0), July 2018 - March 2022

- Thesis: *Towards Everyday Virtual Reality through Eye Tracking*, Grade: 1.0/1.0.
- Supervisor: Prof. Dr. Enkelejda Kasneci

Technical University of Munich (TUM), Germany

M.Sc., Computer Science (with distinction, GPA: 1.4/1.0), April 2014 - September 2016

- Thesis: *Probabilistic and Formal Approaches to Human Occupancy Prediction for Safe Human-Robot Collaboration*, Grade: 1.0/1.0.
- Thesis supervisor: Prof. Dr.-Ing. Matthias Althoff

Istanbul Technical University (ITU), Turkey

B.Sc., Computer Engineering (good, GPA: 3.18/4.0), September 2008 - February 2014

- Exchange year, Technical University of Munich, October 2011 - September 2012
- Thesis: *Plant Recognition via Leaf Images*, Grade: 4.0/4.0.
- Thesis supervisor: Prof. Dr. Hazım Kemal Ekenel

- [1] Wang, M., A. Bodonhelyi, **E. Bozkir**, and E. Kasneci. TurboSVM-FL: Boosting Federated Learning through SVM Aggregation for Lazy Clients. (To appear) In: *38th AAAI Conference on Artificial Intelligence (AAAI-24)*, February 20–27, 2024. Vancouver, Canada. doi:10.48550/arXiv.2401.12012
- [2] Byrne, S., N. Castner, **E. Bozkir**, D. Niehorster, and E. Kasneci. From Lenses to Living Rooms: A Policy Brief on Eye Tracking in XR Before the Impending Boom. (To appear) In: *IEEE International Conference on Artificial Intelligence & Extended and Virtual Reality (IEEE AIxVR)*, January 17–19, 2024. Los Angeles, CA, USA. doi: TBD
- [3] Gao, H., **E. Bozkir**, P. Stark, P. Goldberg, G. Meixner, E. Kasneci, and R. Göllner. Detecting Teacher Expertise in an Immersive VR Classroom: Leveraging Fused Sensor Data with Explainable Machine Learning Models. (To appear) In: *IEEE International Symposium on Mixed and Augmented Reality (ISMAR)*, October 16–20, 2023. Sydney, Australia. doi:10.1109/ISMAR59233.2023.00083
- [4] Gallardo, A., C. Choy, J. Juneja, **E. Bozkir**, C. Cobb, L. Bauer, and L. Cranor. Speculative Privacy Attitudes and Concerns About AR Glasses Data Collection. In: *Proceedings on Privacy Enhancing Technologies (PETS)*, July 10–15, 2023. Lausanne, Switzerland. doi:10.56553/popets-2023-0117
- [5] Bühler, B., R. Hou, **E. Bozkir**, P. Goldberg, P. Gerjets, U. Trautwein, and E. Kasneci. Automated hand-raising detection in classroom videos: A view-invariant and occlusion-robust machine learning approach. In: *International Conference on Artificial Intelligence in Education (AIED)*, July 3–7, 2023. Tokyo, Japan. doi:10.1007/978-3-031-36272-9_9
- [6] Fotopoulous, N., C. Riedmiller, **E. Bozkir**, P. Tsinganos, D. Ampeliotis, G. Kasneci, E. Kasneci, and A. Skodras. Could Human Gaze Augment Detectors of Synthetic Images? In: *24th International Conference on Digital Signal Processing (DSP)*, June 11–13, 2023. Rhodes, Greece. doi:10.1109/DSP58604.2023.10167876
- [7] Gao, H., L. Hasenbein, **E. Bozkir**, R. Göllner, and E. Kasneci. Evaluating the Effects of Virtual Human Animation on Students in an Immersive VR Classroom Using Eye Movements. In: *ACM Symposium on Virtual Reality Software and Technology (VRST)*, November 29–December 1, 2022. Tsukuba, Japan. doi:10.1145/3562939.3565623
- [8] Loi, I., A. Grammatikaki, P. Tsinganos, **E. Bozkir**, D. Ampeliotis, K. Moustakas, E. Kasneci, and A. Skodras. Proportional Myoelectric Control in a Virtual Reality Environment. In: *IEEE 14th Image, Video, and Multidimensional Signal Processing Workshop (IVMSP)*, June 26–29, 2022. Nafplio, Greece. doi:10.1109/IVMSP54334.2022.9816252
- [9] **Bozkir, E.**, G. Kasneci, S. Utz, and E. Kasneci. Regressive Saccadic Eye Movements on Fake News. In: *Symposium on Eye Tracking Research and Applications (ETRA)*, June 8–11, 2022. Seattle, WA, USA. doi:10.1145/3517031.3529619
- [10] Rong, Y., N. Castner, **E. Bozkir**, and E. Kasneci. User Trust on an Explainable AI-based Medical Diagnosis Support System. In: *CHI Workshop on Trust and Reliance in AI-Human Teams*, April 30, 2022. New Orleans, LA, USA. doi:10.48550/arXiv.2204.12230
- [11] Fuhl, W., **E. Bozkir**, and E. Kasneci. Reinforcement learning for the privacy preservation and manipulation of eye tracking data. In: *International Conference on Artificial Neural Networks (ICANN)*, September 14–17, 2021. Online Event. doi:10.1007/978-3-030-86380-7_48
- [12] Gao, H., **E. Bozkir**, L. Hasenbein, J.U. Hahn, R. Göllner, and E. Kasneci. Digital Transformations of Classrooms in Virtual Reality. In: *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems (CHI)*, May 8–13, 2021. Yokohama, Japan. doi:10.1145/3411764.3445596

- [13] **Bozkir, E.**, P. Stark, H. Gao, L. Hasenbein, J.U. Hahn, E. Kasneci, and R. Göllner. Exploiting Object-of-Interest Information to Understand Attention in VR Classrooms. In: *2021 IEEE Virtual Reality and 3D User Interfaces (VR)*, March 27–April 1, 2021. Lisboa, Portugal. doi:10.1109/VR50410.2021.00085
- [14] **Bozkir, E.**, S. Eivazi, M. Akgün, and E. Kasneci. Eye Tracking Data Collection Protocol for VR for Remotely Located Subjects using Blockchain and Smart Contracts. In: *2020 IEEE International Conference on Artificial Intelligence and Virtual Reality (AIVR) Work-in-progress papers*, December 14–18, 2020. Utrecht, Netherlands. doi:10.1109/AIVR50618.2020.00083
- [15] **Bozkir, E.**, A.B. Ünal, M. Akgün, E. Kasneci, and N. Pfeifer. Privacy Preserving Gaze Estimation using Synthetic Images via a Randomized Encoding Based Framework. In: *ACM Symposium on Eye Tracking Research and Applications (ETRA)*, June 2–5, 2020. Stuttgart, Germany. doi:10.1145/3379156.3391364
- [16] **Bozkir, E.**, D. Geisler, and E. Kasneci. Assessment of Driver Attention during a Safety Critical Situation in VR to Generate VR-based Training. In: *ACM Symposium on Applied Perception (SAP) 2019*, September 19–20, 2019. Barcelona, Spain. doi:10.1145/3343036.3343138
- [17] Fuhl, W., **E. Bozkir**, B. Hosp, N. Castner, D. Geisler, T.C. Santini, and E. Kasneci. Encodji: encoding gaze data into emoji space for an amusing scanpath classification approach ;) In: *Proceedings of the 11th ACM Symposium on Eye Tracking Research & Applications (ETRA)*, June 25–28, 2019. Denver, CO, USA. doi:10.1145/3314111.3323074
- [18] **Bozkir, E.**, D. Geisler, and E. Kasneci. Person Independent, Privacy Preserving, and Real Time Assessment of Cognitive Load using Eye Tracking in a Virtual Reality Setup. In: *IEEE Conference on Virtual Reality and 3D User Interfaces (VR) Workshops*, March 23–27, 2019. Osaka, Japan. doi:10.1109/VR.2019.8797758
- JOURNAL PUBLICATIONS
- [19] Ferdinand, J., H. Gao, P. Stark, **E. Bozkir**, J.-U. Hahn, E. Kasneci, and R. Göllner. The Impact of a Usefulness Intervention on Students’ Learning Achievement in a Virtual Biology Lesson: An Eye-Tracking-Based Approach. *Learning and Instruction*. 2024. doi:10.1016/j.learninstruc.2023.101867
- [20] Gao, H., L. Hasenbein, **E. Bozkir**, R. Göllner, and E. Kasneci. Exploring Gender Differences in Computational Thinking Learning in a VR Classroom: Developing Machine Learning Models Using Eye-Tracking Data and Explaining the Models. *International Journal of Artificial Intelligence in Education*. 2022. doi:10.1007/s40593-022-00316-z
- [21] **Bozkir, E.**, O. Günlü, W. Fuhl, R.F. Schaefer, and E. Kasneci. Differential privacy for eye tracking with temporal correlations. *PLoS ONE*. 2021. doi:10.1371/journal.pone.0255979
- [22] Sümer, Ö., **E. Bozkir**, T. Kübler, S. Grüner, S. Utz, and E. Kasneci. FakeNewsPerception: An eye movement dataset on the perceived believability of news stories. *Data in brief*. 2021. doi:10.1016/j.dib.2021.106909
- BOOK CHAPTERS
- [23] Papakçı, A., and **E. Bozkir**. Yeni Bir Tür Olarak “Yapay Akıl” (In Turkish) - (“Artificial Intelligence as a New Species”), *Adaletle Yönelmiş Bir Toplumsal Düzen Olarak Hukuk: Prof. Dr. Yasemin Işıқтаç Armağanı (“Law as a Social Order Oriented to Justice: Prof. Dr. Yasemin Işıқтаç Gift”)*, pp. 235–261, 2020. isbn: 9786057015211.
- ONLINE PREPRINTS AND WORKING PAPERS
- [24] **Bozkir, E.**, S. Özdel, K. H. C. Lau, M. Wang, H. Gao, and E. Kasneci. Embedding Large Language Models into Extended Reality: Opportunities and Challenges for Inclusion, Engagement, and Privacy. *Preprint*, 2024. doi:10.48550/arXiv.2402.03907.

- [25] Bodonhelyi, A., **E. Bozkir**, S. Yang, E. Kasneci, and G. Kasneci. User Intent Recognition and Satisfaction with Large Language Models: A User Study with ChatGPT. *Under review*, 2024. doi:10.48550/arXiv.2402.02136.
- [26] Menéndez González, N., and **E. Bozkir**. Eye-tracking devices for virtual and augmented reality Metaverse environments and their compatibility with the European Union General Data Protection Regulation. *RSC Working paper. Under review*, 2023. doi:10.2139/ssrn.4660686.
- [27] **Bozkir, E.**, S. Özdel, M. Wang, B. David-John, H. Gao, K. Butler, E. Jain, and E. Kasneci. Eye-tracked Virtual Reality: A Comprehensive Survey on Methods and Privacy Challenges. *Under review*, 2023. doi:10.48550/arXiv.2305.14080.
- NON-ARCHIVAL
CONFERENCE
CONTRIBUTIONS
- [28] Kasneci, E. and **E. Bozkir**. Privacy in Educational Virtual Reality: Challenges for Educational Practices. In: *20th Biennial EARLI Conference*, August 22–26, 2023. Thessaloniki, Greece.
- [29] Bühler, B., **E. Bozkir**, P. Goldberg, P. Gerjets, U. Trautwein, and E. Kasneci. Investigating student’s gaze synchrony in the classroom as indicator for student engagement. In: *20th Biennial EARLI Conference*, August 22–26, 2023. Thessaloniki, Greece.
- [30] Bühler, B., R. Hou, **E. Bozkir**, P. Goldberg, P. Gerjets, U. Trautwein, and E. Kasneci. Automated hand-raising detection in classroom videos. In: *20th Biennial EARLI Conference*, August 22–26, 2023. Thessaloniki, Greece.
- [31] Bühler, B., **E. Bozkir**, P. Goldberg, P. Gerjets, U. Trautwein, and E. Kasneci. Multi-modal fine-grained mind wandering assessment during online learning. In: *Current Issues in Mind-Wandering Research - Theoretical Advances and New Empirical Findings*, July 6–8, 2023. Heidelberg, Germany.
- [32] Stark, P., H. Gao, P. Goldberg, **E. Bozkir**, E. Kasneci, and Richard Göllner. Maschinelles Lernen zur Analyse professioneller Unterrichtswahrnehmung im virtuellen Klassenzimmer (English: Machine learning to analyze professional teaching perceptions in the virtual classroom). In: *Symposium: Unterrichtserleben in Virtual Reality als Chance für die Lehrkräftebildung in 10th GEBF Annual Conference*, (to appear), February 28–March 2, 2023. Essen, Germany.
- [33] Bühler, B., **E. Bozkir**, P. Goldberg, S. D’Mello, P. Gerjets, U. Trautwein, and E. Kasneci. Video-based Mind-wandering Detection Employing Gaze Features in Temporal Models during Reading. In: *SIG 27 Conference - Online measures at the crossroad of ethical and methodological challenges*, August 30–September 1, 2022. Southampton, UK.
- [34] Stark, P., L. Hasenbein, **E. Bozkir**, H. Gao, and E. Kasneci. Einsatz von Eye-Tracking in virtuellen Realitäten in der Bildungsforschung (English: Use of eye tracking in virtual reality in educational research). In: *Symposium: Virtuelle Realitäten in der empirischen Lehr-Lernforschung: Ein Werkstattbericht aus dem Tübinger Virtual Reality Research on Education (VRE) Lab in 9th GEBF Annual Conference*, March 9–11, 2022. Bamberg, Germany.
- SELECTED
INVITED TALKS
- [35] **Bozkir, E.**, Eye Tracking in Human-Computer Interaction and Privacy-preserving Eye Tracking. In: *Seattle Children’s Research Institute*, December 5, 2022. Seattle, WA, USA.
- [36] **Bozkir, E.** Eye Tracking in Human-Computer Interaction and Its Privacy Aspects. In: *Current Topics in Privacy Seminar, Carnegie Mellon University*, September 29, 2022. Pittsburgh, PA, USA.

- [37] **Bozkir, E.**, Privacy Considerations for Eye Tracking and Differential Privacy. In: *36th Meeting of the ITG Professional Group “Applied Information Theory”, New Approaches to Security & Privacy in Communication Systems*, November 10, 2021. Virtual.
- [38] **Bozkir, E.**, Data-driven Applications in Education Domain and Their Privacy Considerations. In: *AI Systems Tübingen Meetup*, April 29, 2021. Virtual.
- [39] **Bozkir, E.**, Safer Driving Experience and Cognitive Load Assessment in Risky Situations via Virtual Reality. In: *Young Researcher Vision Camp*, July 12–14, 2019. Castle Wildenstein, Leibertingen, Germany.

TEACHING

Technical University of Munich

Summer 2024

Lecturer for Practical Course: Serious Games in XR, Seminar: Recent Advances in Privacy, Seminar: Recent Advances in Human-Computer Interaction.

Winter 2023-2024

Lecturer for Course: Human-AI Interaction, Practical Course: Serious Games in XR, Seminar: Recent Advances in Privacy.

Summer 2023

Lecturer for Course: Human-AI Interaction, Practical Course: Large Language Models in Extended Realities.

University of Tübingen

Summer 2022

Teaching Assistant for Course: Human-AI Interaction.

Summer 2020, 2021, Winter 2021-2022

Teaching Assistant for Seminar: Introductory Topics in Human-Computer Interaction.

Winter 2020-2021, Summer 2021

Teaching Assistant for Seminar: Advanced Topics in Human-Computer Interaction.

Summer 2019, 2020

Teaching Assistant for Seminar: Advanced Topics in Perception Engineering.

ADVISING AND MENTORING

Ongoing B.Sc./M.Sc. Theses, Ph.D. Dissertations, Research Projects

- Kadir Burak Buldu, M.Sc. Student in Computer Science, Student research assistant at TU Munich, February 2024 – Present (Supervisor)
- Melisa Yilmaz, M.Sc. Student in Games Engineering, Student research assistant at TU Munich, November 2023 – Present (Supervisor)
- Ozan Aydin, M.Sc. Student in Computer Science, Interdisciplinary project at TU Munich, October 2023 – Present (Advisor)
- Busra Buyukgebiz, M.Sc. Student in Computer Science, Interdisciplinary project at TU Munich, October 2023 – Present (Advisor)
- Esra Çakı, Ph.D. Candidate in Educational Sciences at Université Paris Cité, May 2023 – Present (Tutor & TAC Member).
- Süleyman Özdel, Ph.D. Candidate in Computer Science at TU Munich, March 2023 – Present (Advisor & Mentor).

- Mengdi Wang, Ph.D. Candidate in Computer Science at TU Munich, March 2023 – Present (Advisor).

Completed B.Sc./M.Sc. Theses, Research/Internship Projects

- Engineering Internship: Usable privacy in cognitive and physiological data collection, July 2023 – September 2023 (Supervisor).
- Research Internship: Analyzing attentional processes in real-life social interactions: A case of teacher-student interactions. Completed in November 2022 (Advisor).
- B.Sc. Thesis in Computer Science: Joint Attention in Web-based VR. Completed in September 2022 (Advisor).
- Engineering Internship: Introduction to low-cost attention tracking via eye tracking. Completed in September 2022 (Supervisor).
- M.Sc. Research Project: Open Source Avatars - 3D Avatar Reconstruction From A Single Image. Completed in August 2022 (Advisor).
- B.Sc. Thesis in Cognitive Science: Gaze-based Discrimination of Computer Graphics from Photo Images. Completed in August 2022 (Advisor).
- M.Sc. Thesis in Computer Science: Human-Computer Interaction in the Era of Autonomous Traffic in VR. Completed in July 2022 (Advisor).
- B.Sc. Thesis in Computer Science: Universalizing the VR experience - A Web approach. Completed in February 2022 (Advisor).
- B.Sc. Thesis in Computer Science: Data Augmentations in Mixed Reality Machine Learning Applications. Completed in 2021 (Co-advisor with Dr. Shahram Eivazi).
- B.Sc. Thesis in Computer Science: Towards Avatar Interaction and Teleportation in Virtual Environments. Completed in 2021 (Advisor).
- M.Sc. Thesis in Cognitive Science: Towards Understanding Attention in Virtual Reality - Analysing Visual Attention in a VR-Classroom Experiment. Completed in 2020 (Mentor).
- B.Sc. Thesis in Cognitive Science: Effectiveness of Augmented Reality for Human Performance in Assembly. Completed in 2019 (Advisor).

ACADEMIC SERVICE

Organization Committees

- Sponsor Chair at *ACM Symposium on Eye Tracking Research & Applications (ETRA)*, 2024
- Publicity Chair at *24th International Conference on Digital Signal Processing (DSP)*, 2023
- Poster Chair at *ACM Symposium on Eye Tracking Research & Applications (ETRA)*, 2023
- Doctoral Consortium Mentor at *ACM Symposium on Eye Tracking Research & Applications (ETRA)*, 2023

Editorial Board Membership/International Program Committee (IPC)

- Review Editor of Virtual Reality and Human Behavior track at *Frontiers in Virtual Reality*
- Editorial Board Member/IPC at *ACM Symposium on Eye Tracking Research & Applications (ETRA)*, *Short Papers*, 2022, 2024
- IPC at *ACM International Conference on Multimodal Interaction (ICMI)*, 2022, 2023
- IPC at *International Conference on Artificial Neural Networks (ICANN)*, 2022, 2023
- IPC at *NeurIPS Gaze Meets ML Workshop*, 2022, 2023

Reviewing Service

- *ACM CHI Conference on Human Factors in Computing Systems (CHI) 2022, 2023, 2024*
- *IEEE Virtual Reality and 3D User Interfaces (VR) 2022, 2023, 2024*
- *ACM Symp. on Eye Tracking Research & Applications (ETRA) 2021, 2022, 2023*
- *IEEE Int. Symp. on Mixed and Augmented Reality (ISMAR) 2021, 2022, 2023*
- *ACM Int. Conference on Mobile Human-Computer Interaction (MobileHCI) 2022, 2023*
- *IEEE 17th Pacific Visualization Symposium (PacificVis 2024)*
- *24th International Conference on Digital Signal Processing (DSP), 2023*
- *Nordic Conference on Human-Computer Interaction (NordiCHI) 2022*
- *ACM Australian Conference on Human-Computer Interaction (OzCHI) 2021, 2022*
- *ACM Int. Conf. on Multimodal Interaction (ICMI) 2021, 2022*
- *ACM CHI PLAY 2021*
- *ACM Conf. on Computer-Supported Cooperative Work and Social Computing (CSCW) 2021*
- *ACM Symp. on Virtual Reality Software and Technology (VRST) 2021, 2022*
- *ACM Symp. on Spatial User Interaction (SUI) 2021, 2022*
- *ACM Interaction Design and Children (IDC) Conference 2021*
- *ACM Int. Joint Conf. on Pervasive and Ubiq. Computing (UbiComp/ISWC) 2021, 2022*
- *IFIP Int. Conf. on Human-Computer Interaction (INTERACT) 2021*
- *Int. Conf. on Artificial Neural Networks (ICANN) 2021, 2022*
- *IEEE Signal Processing and Communications Applications (SIU) 2021, 2022, 2023, 2024*
- *IEEE Transactions on Big Data*
- *IEEE Transactions on Human-Machine Systems*
- *Computers & Education*
- *Biomedical Engineering Online*
- *Communication Studies Journal*

FUNDINGS AND GRANTS

Technical University of Munich

- PI of the grant “De-mystifying AI - Using conversational agents to explain how conversational agents work” funded by TUM Think Tank, 2024.

University of Tübingen

- Grant recipient: Travel&Accommodation grant for my research visit to Carnegie Mellon University - CyLab from Cluster of Excellence - Machine Learning: New Perspectives for Science, from Deutsche Forschungsgemeinschaft - German Research Foundation (DFG).
- Co-author of the grant, “PrivatEye: Privacy-preserving eye movement data manipulation for virtual and augmented reality,” Deutsche Forschungsgemeinschaft - German Research Foundation (DFG), 2022 - 2025.
- Co-author of the grant, “Egocentric Perception, Interaction and Computing in the Deep Learning Era,” German Academic Exchange Service (DAAD), 2020 - 2022.

Istanbul Technical University

- Istanbul Technical University, Ibrahim Sencan Success Scholarship, 2010–2012.
- Erasmus Student Scholarship, 2011–2012.

MEMBERSHIPS

- Institute of Electrical and Electronics Engineers (IEEE), 2019 - Present
- Association for Computing Machinery (ACM), 2019 - Present
- Beşiktaş J.K., Member of Congress, 2013 - Present
- Istanbul Technical University Alumni Association Izmir Branch
- Bornova Anatolian High School Alumni Association

COMPUTER AND LANGUAGE SKILLS

Programming Languages and Skills

- Experience in MATLAB, Python, C#, Java, C/C++, Unity3D, Git, Crowdsourcing (e.g., Qualtrics, Prolific), Spring.

- Familiar with Python scientific libraries (e.g., scikit-learn, pandas, NumPy, etc.), Keras, OpenCV, PyTorch, HTML, \LaTeX , Project Management, Scrum.
- Used Caffe, Unreal Engine, MySQL, NoSQL, Javascript, Docker, Stanford CoreNLP, SpaCy, GATE, Alexa Skillkit, Swift, Objective-C, x86 Assembly, ASP.NET, Wicket.

Languages

English (fluent), German (intermediate), Turkish (native)

INTERNSHIP AND STUDENT POSITIONS	Student Research Assistant, FZI Forschungszentrum Informatik August 2019 - June 2021 Karlsruhe, Germany Tasks: Research
	Part-time Software Developer, Texas Instruments GmbH May 2015 - September 2016 Freising, Germany Task: Back-end development for efficient semi-conductor manufacturing
	Student Research Assistant, Technical University of Munich October 2014 - March 2015 Computer Vision Group, Munich, Germany Tasks: Android application development for scientific visualization, maintenance of drones
	Software Engineering Intern, Turkcell Technology R&D July 2013 - September 2013 Kocaeli & Istanbul, Turkey Tasks: PL/SQL development and software testing
	Software Developer Intern, Valensas Tech. Services September 2012 - October 2012 Istanbul, Turkey Task: Android development
	IT Intern, Turkish Derivatives Exchange August 2012 - September 2012 Izmir, Turkey Tasks: Introduction to web development (C#/.NET) and futures/options markets
	Software Developer Intern, Bilkom July 2011 - August 2011 Istanbul, Turkey Task: iOS development, cooperation with Valensas Tech. Services
	Student Assistant, Istanbul Technical University September 2008 - July 2011 Istanbul, Turkey Tasks: Media works of the university, candidate advising, PR

SOCIAL ACTIVITIES AND OTHER ACHIEVEMENTS

- Football player (CB) of ITU Faculty of Computer and Informatics, TR, 2011 - 2014.
- Basketball player (SF/PF) of FC Anadolu Bayern in Kreisliga, GER, 2011 - 2012.
- Vice president of ITU Computer and Informatics Society, 2011 - 2012.
- Yacht race team member of Istanbul Technical University, 2009 - 2010.
- Played basketball and did sailing amateurly in Izmir in several places before 2010.
- Participation in national mathematics olympiads of Turkey in 2004 and 2002.

REFERENCES AVAILABLE TO CONTACT

Prof. Dr. Enkelejda Kasneci

- Liesel Beckmann Distinguished Professor, Chair of Human-Centered Technologies for Learning, Technical University of Munich, Germany
- ★ *Dr. Kasneci was my supervisor during my doctoral study at the University of Tübingen. I am currently working with her as well.*

Prof. Dr. Lorrie Faith Cranor

- FORE Systems University Professor, Computer Science, and Engineering & Public Policy, Carnegie Mellon University, USA
- ★ *Dr. Cranor was my supervisor during my research stay at Carnegie Mellon University.*

Prof. Dr. Gjergji Kasneci

- Professor, Chair of Responsible Data Science, [Technical University of Munich](#), Germany
- ★ *Dr. Kasneci has been my collaborator at the University of Tübingen and at the Technical University of Munich.*

Assoc. Prof. Dr. Frederick Shic

- Investigator, Seattle Children's Research Institute,
Associate Professor of Pediatrics & Adjunct Professor of Computer Science & Engineering
& Psychology, [University of Washington](#), USA
- ★ *Dr. Shic is my collaborator on the projects related to Autism Spectrum Disorder and eye tracking.*

Prof. Dr. Athanassios N. Skodras

- Professor, Department of Electrical and Computer Engineering, [University of Patras](#), Greece
- ★ *Dr. Skodras has been my collaborator starting from 2020 through the DAAD grant&project.*

Prof. Dr. Muhittin Gökmen

- Professor, Department of Computer Engineering, [MEF University](#), Turkey
- ★ *Dr. Gökmen was a member of the Computer Engineering Department at Istanbul Technical University during my undergraduate study.*

Additional references are available upon request.