Curriculum Vitae

YUSUF OZKAN

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A. Education

- **Ph.D. in Electrical Engineering (in progress)**, New Jersey Institute of Technology
  Newark, NJ
  Ph.D. Candidate, Research and Teaching Assistant. *September 2021 – Present*

- **M.S. in Electrical Engineering**, University of Bridgeport
  Bridgeport, CT
  GPA: 3.80 *September 2017 – May 2020*

- **B.S. in Electric and Electronic Engineering**, Istanbul University
  Istanbul, Turkey
  GPA: 3.4 (Top 5%) *September 2011 – May 2017*

B. Publications

1. **Y. Ozkan** and B. D. Barkana, *Forensic Audio Analysis and Event Recognition for Smart Surveillance Systems*, IEEE Int. Symposium on Technologies for Homeland Security, Nov 5–6, 2019, MA, USA.

2. **Y. Ozkan** and B. D. Barkana, *Multi-class Mental Task Classification via Statistical Features and KNN, SVM, Discriminant Analysis, and Decision Trees*, 2020 IEEE 5th Middle East Conf. on Biomedical Engineering.

3. **Y. Ozkan** and B. D. Barkana, *How much time does our brain need to relax?*, Archives in Neurology & Neuroscience, 2020, DOI: 10.33552/ANN.2020.06.000636.

4. B. D. Barkana and **Y. Ozkan**, *Analysis of working memory from EEG signals under different emotional states*, Biomedical Signal Processing and Control Journal, 2022.

5. A. Borgaonkar, R. B. Ventura, L. Tchouassi, J. Sodhi, and **Y. Ozkan**, *WIP: Evaluating the impact of an introductory first-year engineering design course in shaping students' experience and academic preparedness*, Proceedings of the 2025 ASEE Annual Conference & Exposition, 2025. DOI: 10.18260/1-2–57405. [link]

C. Professional Positions Held

- **Research Assistant / Teaching Assistant**, New Jersey Institute of Technology, Newark, NJ *September 2021 – Present*

- Research areas: Information Theory, LDPC Channel Decoding, Reinforcement Learning.
- Instructor for ECE-395 Microprocessors Lab (Fall and Spring 2025).
- Teaching Assistant for ECE-231, ECE-232, FED-101, ENGR-101.

- **Research Assistant / Teaching Assistant**, University of Bridgeport, Bridgeport, CT *January 2018 – December 2020*

  - Conducted research in Forensic Audio Analysis and EEG Signal Processing.
  - TA for Network Analysis I & II, Signals and Systems, Digital Signal Processing.
  - Graded, proctored, posted course materials, and assisted students with homework/exam questions.

D. Honors & Awards

- Sigma Xi Honors Society

- IEEE Student Member, IEEE North Jersey AP-S NJIT Student Branch Chapter Grad Chair

E. Volunteer Experience

- **Scientist-in-Residence Program, Jerome Dunn Academy, New Jersey** *Spring 2024*

  - Integrated real scientific research into the 5th-grade curriculum.
  - Implemented hands-on STEM projects, improving student engagement and interest.

- **Renewable Energy Club President, Istanbul University, Turkey** *Sep 2015 – Jan 2017*

  - Oversaw club administration, prepared annual reports.
  - Organized social/sport events and trips to power plants.

F. Technical Skills

- **Software & Programming:** MATLAB, C, C++, Python, Java, Quartus II, ModelSim-Altera, COMSOL Multiphysics, Tableau

G. Relevant Coursework

- Communication Theory, Machine Learning, Deep Learning, Computer Vision, Computational Intelligence

- Digital Signal Processing, Biosignal Processing, Electromagnetic Wave Theory, Microprocessors II

- Advanced Digital Systems, Python Programming