Barış Cem Bakay

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Education

Koç University   **Sarıyer**, Istanbul
Computer Engineering. Double Major in Physics. Artificial Intelligence Track. GPA: 4.0 / 4
Expected Graduate: 2027

Research Experience

Koç University   **Sarıyer, Istanbul**
Research Internship   **July 2025 - Present**

- Studied on a research project developing a Multimodal LLM in the field of digital pathology. Developed a Chatbot UI. Took part in the processing of whole-slide images and annotations. Visualized the mechanism for processing large whole-slide images and models outcomes for paper.
- Worked on a HPC (High Performance Computing) Cluster, got used to Linux machines. Used different dimension reduction techniques, and got familiar with some Python libraries (torch, numpy, sklearn etc.)

Publications

- Ali Kerem Bozkurt, Baris Cem Bakay, Ibrahim Kulac, Cigdem Gunduz-Demir, Erkut Erdem, Aykut Erdem, "Scalable Whole-Slide Vision-Language Modeling with Learned Token Pruning", *The Second Workshop on GenAI for Health: Potential, Trust, and Policy Compliance (NeurIPS 2025), San Diego, December 2025.*

Work Experience

Koç University   **Sarıyer, Istanbul**
Teaching Assistant

- COMP 132: Assisted in teaching an advanced programming course focused on object-oriented programming principles using Java language.
- UNIV 199: Assisted basics of python programming language to undergraduate students.
- DOS 171: Taught bridge to undergrad students and facilitated regular practice sessions.

Leadership & Activities

Koç University Mountaineering Club   **Sarıyer, Istanbul**
President & Board Member   **October 2023 - January 2025**

- Leading and organized club activities, mostly focused on rock climbing, mountaineering, trekking, hiking and camping. Managed club operations, including budgeting, event scheduling and member engagement.

Other

Technical: Programming Languages: Java, C, Python, Matlab. 3D design with Solidworks and Fusion.
Language: English: Advanced, German: Beginner
Awards & Honors: Ranked 20th in the Turkish National University Entrance Exam (YKS). Awarded the Koç University Anatolian Scholarship.