Siamak Beikzadeh

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EDUCATION

- **University of Massachusetts Amherst** — Amherst, MA
  M.Sc. Computer Engineering — *Feb 2022 - May 2025 (Expected)*
  - **Research**: Advanced Multimedia Networks, AR/VR, QoE
- **Amirkabir University of Technology** — Tehran, Iran
  M.Sc. Computer Engineering, GPA: 4.0/4.0 — *July 2018 - June 2020*
  - **Thesis**: Blockchain-based Accountability in SDN
- **University of Tabriz** — Tabriz, Iran
  B.Sc. Computer Science, GPA: 3.6/4.0 — *July 2012 - June 2017*
  - **Thesis**: 3D SVM kernel for Edge Detection

SKILLS

- **Languages**: Python, C/C++, Swift, MATLAB, JavaScript, SQL, Java
- **Frameworks**: OpenCV, TensorFlow, PyTorch, Keras, Django, Flask, Node.js
- **Tools**: Docker, GNS3, Git, MySQL, SQLite
- **Platforms**: Linux, Windows, AWS, Raspberry Pi, Jetson TX, FABRIC
- **Specialties**: Network Design, SDN/NFV, Blockchain (Ethereum, Hyperledger Fabric), AR/VR (Hololens 2, Unity)

EXPERIENCE

- **University of Massachusetts Amherst** — Amherst, MA
  Research Assistant — *May 2021 - Present*
  - **5G & AETHER**: Research on 5G networks under Prof. Jim Kurose and Prof. Michael Zink.
  - **QoE in 360° Video**: Developing solutions to assess cybersickness in 360° video streaming.
  - **MiVirtualSeat**: Semantics-aware content distribution for immersive meetings with Prof. Ramesh Sitaraman, Prof. Michael Zink, and Prof. Klara Nahrstedt.
- **Telecommunication Research Center** — Tehran, Iran
  Researcher/Developer — *Jan 2019 - Dec 2020*
  - **Blockchain Taxi Payment**: Developed a blockchain platform for taxi payments.
  - **Smart Contracts**: Designed various smart contracts.

PROJECTS

- **Object Detection in 360° Videos**: Developed a method efficient object detection and tracking in 360-degree videos using an ROI technique and 2D projection for improved precision and reduced computational cost.
- **Edge-Assisted 360° Video Streaming**: Proposed a three-tier architecture to optimize 360° video streaming using edge computing.

PUBLICATIONS

- **Gaussian Three-Dimensional kernel SVM for Edge Detection Applications**: Published in Int. Conf. on Computer Science & Electrical Engineering (Dec 2015).
- **360° Video Streaming Using Multicasting**: Submitted for publication, under review.

AWARDS

- **Top 10 Students**: Ranked among top 10 M.Sc. students at Amirkabir University (2019).
- **Ranked 12th**: National university entrance exam for M.Sc. (2020).
- **Best Presentation**: Int. Conf. on Computer Science & Electrical Engineering (2015).

TEACHING EXPERIENCE

- **Teaching Assistant**: TA for Computer Networks (2017, 2018), Advanced Programming (2019), Computer Security (2018, 2019) at Amirkabir University of Technology.
- **Instructor**: Computer Networks and Security Lab Instructor at Amirkabir University of Technology (2018-2019).