Armin Saadat Boroujeni

armin2saadat@gmail.com
+1 236-308-8333
armin-saadat.github.io
linkedin.com/in/armin-saadat

Education

- **University of British Columbia** — Vancouver, Canada
  MASc in Electrical and Computer Engineering — *Sep. 2022 - Expected May. 2024*
- **Sharif University of Technology** — Tehran, Iran
  B.Sc. in Computer Engineering — *Sep. 2017 - May. 2022*
  *GPA: **19.14/20** (4.00/4.00) - ranked among top 10 students.*
- **Allameh Helli High School** — Tehran, Iran
  *Diploma in Mathematics and Physics - GPA: **19.93/20** - ranked 1^{st} among 110 students.* — *Sep. 2013 - May. 2017*
  Affiliated with the National Organization for Development of Exceptional Talents (NODET).

Publications

- **3D Human Pose Prediction: Where Do Simple Approaches Stand?**
  ***Armin Saadat**, Nima Fathi, Saeed Saadatnejad, Taylor Mordan, Alexandre Alahi.* — *submitted to CVPR 2022*
- **Efficient 3D Image Segmentation via Joint Context Completion and 2D Segmentation**
  ***Armin Saadat**, Hossein Khalili, Parnian Zameni, Mahdieh Soleymani Baghshah.* — *submitted to CVPR 2022*

Work Experience

- **Analysaur**
  Co-Founder and Product Manager — *Jul. 2019 - Aug. 2020*
  - A startup company focused on Digital Marketing and Advertising.
  - Created an all-in-one online platform connecting buyers, sellers, and advertisers.
  - Programmed in Python, JavaScript, GO; using frameworks like Django, ReactJs, and VueJs.
- **Weblite Company**
  Software Engineer — *Jan. 2019 - Jun. 2019*
  - An online educational platform enabling teachers and students to present themselves, connect, conduct live sessions, and produce educational content.
  - Developed Weblite messenger, the core of the platform.
  - Designed and developed several applications used in the platform.

Teaching Assistant Experience

- **Design of Algorithms - Lead TA**, Prof. Zarrabi-Zadeh — *Fall 2021*
- **Advanced Information Retrieval**, Prof. Soleymani Baghshah — *Spring 2021*
- **Artificial Intelligence**, Prof. Rohban — *Spring 2021*
- **Design of Algorithms**, Prof. Seddighin — *Spring 2021*
- **Discrete Structures**, Prof. Abam — *Fall 2020*
- **Discrete Structures**, Prof. Zarrabi-Zadeh — *Fall 2020*
- **Artificial Intelligence**, Prof. Rohban — *Spring 2020*
- **Linear Algebra**, Prof. Rabiee — *Spring 2020*

Honors and Awards

- **Vector Scholarship in Artificial Intelligence**
- **Member of Iran's National Elites Foundation**
- **Captain of the Sharif Basketball Team**
  Won 2^{nd} place in Tehran, and found our way to the nation-wide Olympiad.
- **Ranked 14^{th} in the Nation-Wide University Entrance Examination**
  B.Sc. in Mathematics and Physics, among over 145,000 participants, 2017, Iran
- **Ranked 71^{st} in the Foreign Languages University Entrance Examination**
  B.Sc. in Foreign Languages, among over 120,000 participants, 2017, Iran

Selected Coursework

- **System Analysis and Design**: 100%
- **Machine Learning** (graduate): 100%
- **Artificial Intelligence**: 100%
- **Linear Algebra**: 100%
- **Advanced Information Retrieval**: 95%
- **Intro to Entrepreneurship**: 100%
- **Calculus**: 100%
- **Design of Algorithms**: 100%
- **Numerical Computation**: 100%
- **Discrete Structures**: 97%

Academic Services

- **Scientific Staff**, DataDays, Iran's Largest Machine Learning and Data Science Competition *2020*
- **Scientific & Technical Staff**, Sharif AI Challenge, Iran's Largest AI Competition *2018, 2019*
- **Technical Specialist**, Sharif Winter Seminar Series, Annual Seminar in advanced topics of CSE *2018, 2019*

Technical Skills

- **Programming Languages**: Python, Java, C, C++, JavaScript
- **Machine Learning Frameworks**: PyTorch, TensorFlow, Keras, NumPy, OpenCV, Scikit-Learn, Pandas
- **Web Development & Database**: Django, Vue.js, MongoDB, HTML, CSS
- **Hardware Design**: Quartus, Arduino, Proteus, ModelSim, Verilog, MIPS Assembly
- **Miscellaneous**: Git, Linux, Windows, LaTeX, Microsoft Office (word, excel, powerpoint)
- **Standardized Tests**: TOEFL (R:28, L:30, S:23, W:29, sum:110), GRE (Q:170, V:149, AW:4.0)

Research Experience

Human Pose Prediction & Forecasting the Trajectory of Pedestrians Lausanne, Switzerland

- *Research Assistant at the Visual Intelligence for Transportation (VITA) Lab, EPFL* *Jul. 2021 - Nov. 2021*
  Supervisor: Prof. ***Alexandre Alahi***
  - Conducted a literature review on Trajectory & Pose Prediction methods.
  - Developed a **novel model** outperforming baselines by **20%**. Accepted in **ICCV 2021**: paper
  - Won **3rd** place in the **Stanford Challenge** on Social Motion Forecasting: source-code
  - Developed a **library** for pose prediction, supporting over **10 models** and **8 datasets**.

Weakly-Supervised Segmentation Using RNN-Based Registration Tehran, Iran

- *Research Assistant at the Medical Imaging Lab, Sharif University of Technology* *May. 2021 - present*
  Supervisor: Prof. ***M.Soleymani Baghshah***
  - Proposed a method to label 2D slices of 3D data, given a few labeled ones. source-code
  - Combined U-Net with an RNN to take advantage of the sequential information of consecutive slices.
  - Improved results by up to **5%** on abdominal datasets compared to the state-of-the-art.

Spatio-Temporal Segmentation of Myocardial Infarction Tehran, Iran

- *Research Assistant at the Medical Image Analysis Lab, Sharif University of Technology* *Oct. 2020 - Nov 2021*
  Supervisor: Prof. ***M.H.Rohban***
  - Used cardiac MRI to segment scar tissues of the heart causing possible future heart attacks.
  - Achieved clean data from inconsistent clinical data using deformable registration techniques.
  - Combined LSTM with Conv3D to extract temporal features for infarction delineation.
  - Exploited transformers to achieve state-of-the-art results.

Hobbies

Playing Basketball, Observational Astronomy, Camping, Playing the Piano