Name: **Kaveh Alizadeh**
Email: Kaveh.Alizadeh@student.sharif.ir

Education

B.Sc.

University: **Tabriz University** (2013-2017)

Major: **Mechanical Engineering** (Specialization: Manufacturing Processes)

Thesis: Wire electrical discharge machining of magnesium alloys: the investigation of the effect of process input parameters on performance characteristics

Supervisor: Prof. Amir Mostafapour

M.Sc.

University: **Amirkabir University of Technology** (2017-2020)

Major: **Mechanical Engineering** (Specialization: Manufacturing Processes)

Thesis: Evaluation of formability and forming analysis of thick anisotropic Ti sheets at various temperatures

Supervisors: Prof. Bijan Mollaei-Dariani

Ph.D. (2021-Present)

University: **Sharif University of Technology**

Major: **Nanotechnology** (Specialization: Nanoelectronics and Nanomaterials)

Research Interests

Flexible/Stretchable Electronics
Soft-matter Electronics
Human-Machine Interaction
Two-Dimensional Electronic Materials (Graphene, TMDs, Van der Waals Heterostructures)
Advanced Energy Storage Materials (Nanomaterials for Li-ion Batteries)

English Proficiency Exams

TOEFL (ibt)**: 96/120** (date: 28 October 2020)

Achievements

Ranked 7th out of +19,000 participants in the National University Entrance Exam for M.Sc. degree in Mechanical Engineering (2017).

Ranked 3rd in the Department of Mechanical Engineering among entrants of 2013, Tabriz University.

Publications

C. Majidi, **K. Alizadeh**, Y. Sik Ohm, A. Silva, M. Tavakoli, "**Liquid Metal Polymer Composites: form Printed Stretchable Circuits to Soft Actuators**" (In Progress) Journal of **Flexible and Printed Electronics** (2021)

K. Alizadeh," Robust and Multifunctional Liquid-Metal Embedded Elastomers for Ultrastretchable Electronics: a Short Review" **arxiv** DOI: https://arxiv.org/abs/2104.07327

K. Alizadeh, B. Mollaei Dariani, M.R. Morovvati**" a Computational study of plastic deformation of nanoscale freestanding thin films using a hyperelastic-viscoplastic crystal plasticity constitutive model: Application to the characterization of NEMS materials and devices"** 3rd International Conference on Mechanical, Electrical, and Computer Engineering (2021).

K. Alizadeh," Localized strain prediction in thin films on soft substrates bilayer systems using the combination of a plastic instability criterion and the FEM method: Application to the necking strains prediction in metallic thin films in Stretchable electronics" 3rd International Conference on Mechanical, Electrical, and Computer Engineering (2021)**.**

K. Alizadeh, M R. Morovvati, B. Mollaei Dariani, "**Forming limit diagram prediction of thick anisotropic sheet metals at warm conditions using finite element modeling of hemispherical-punch stretch forming**," 3rd international conference on Mechanical Engineering, Materials, and Metallurgy (2020).

K. Alizadeh "A review on Constrained Groove Pressing-Severe Plastic Deformation (CPG-SPD) technique for producing ultrafine-grained sheet metals," 3rd National Conference on Computational and Experimental Mechanics, Tehran, Iran (2021).

Academic Experience

Graduate Research Assistant (Advisor: Prof. Bijan Mollaei Dariani) (January 2018 – January 2020) New Materials Forming Research Center, Department of Mechanical Engineering, Amirkabir University of Technology.

Teaching Assistant for **computer programming principles** (in Fortran90) in the mechanical engineering department of Tabriz University (Fall 2016).
- Leading and supervising students in course materials, assignments, and exams.
- Instructor: Prof. Vahid Pouyafar.

Software Skills

Abaqus, Ansys, FORTRAN, CATIA, SolidWorks, Powermill, Cura