

סוג הפרויקט:

גמר מחקרי

שם הפרויקט:

Digital Image Correlation software for 3D strain measurements

פרטי מנחה הפרויקט:

שם המנחה: דנה סולב

טלפון:

5494

דוא"ל:

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מספר הסטודנטים לפרויקט: פרויקט גמר מחקרי מבוצע על ידי סטודנט יחיד

מטרת הפרויקט:

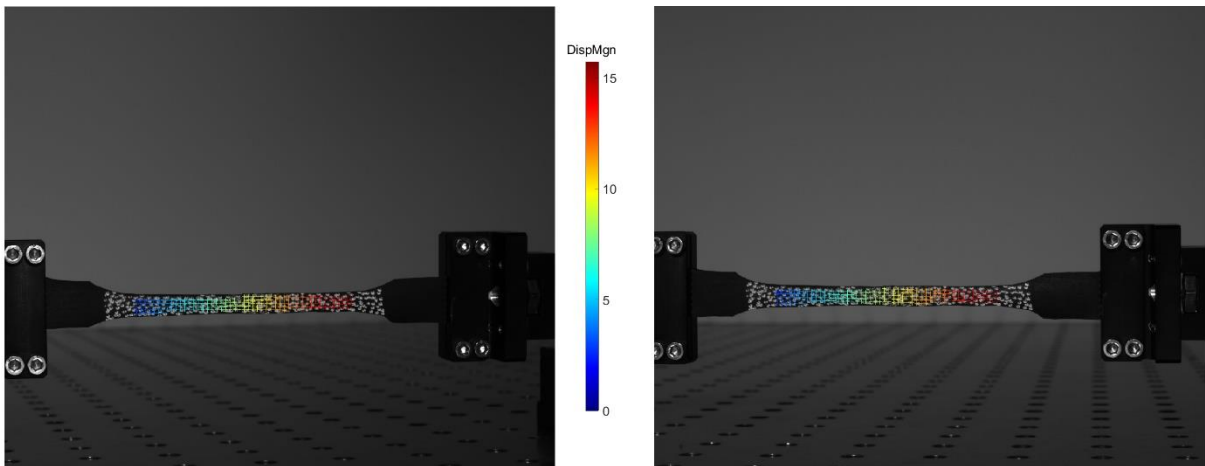
Our research group develops software for 3D digital image correlation (3D-DIC), in the form of the MATLAB toolboxes [MultiDIC](#) and [DuoDIC](#). These toolboxes are used for evaluating the mechanical behavior of materials and structures, by imaging the surface of the material simultaneously with two or more cameras. Since we are continuously evolving and improving the codes, we are looking for a student who will develop and implement new algorithms, and validate them using experiments in the lab.

This project requires high proficiency in MATLAB, and preferably also C++, GitHub, and excellent English.

תיאור שלבי הפרויקט:

- Literature review
- Learning to use the current codes and understand them
- Identifying potential improvements
- Developing the algorithms for implementation
- Implementing the new codes
- Testing by running synthetic and real experiments and analyzing the results
- Concluding and suggesting future work
- Writing the project report

**When applying to this project, please include your CV and transcript, and what makes you a good candidate for performing this project.**



Images of a uniaxial tension test on a rubber “dogbone” sample. The full-field displacement magnitudes (in mm) are overlaid on the original images.