

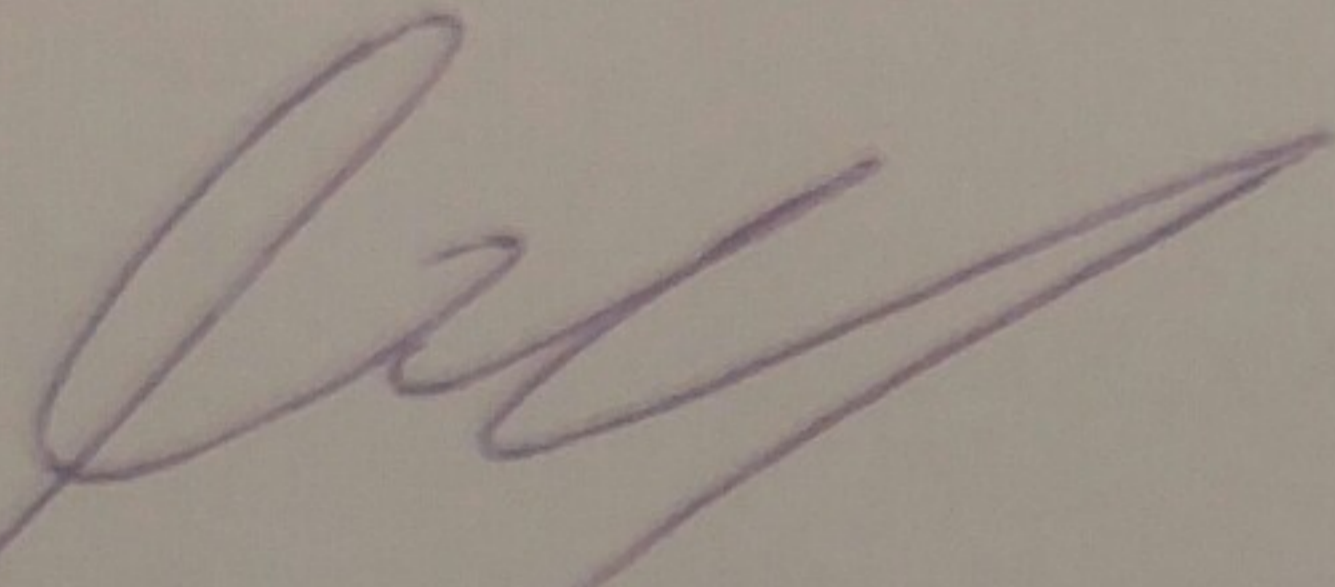
This letter is to confirm that Mohammad Mohsen Zadehkamand, a student in the Master of Science in Computational Mechanics worked as an intern at the Institute for Bioengineering of Catalonia (IBEC) in the Integrative Cell and Tissue Dynamics group (ICTD). The internship started on June 12th and finished by August 31st. The student has successfully accomplished the following tasks:

	Tasks	Starting date	Finishing date	Approximate duration
1	Becoming familiar with IBEC and state-of-the-art on Traction Force Microscopy (TFM) in cell and tissue mechanics.	12 June	18 June	1 week
2	Researching on currently available open-source Finite Element software packages containing hyper-elastic models and capable of being operated by external codes, in a fully automatic manner.	19 June	2 July	2 weeks
3	Starting modelling with FEBio software package. This includes finding appropriate versions for Windows platform and solving installation problems. Learning how to model in Pre-View software, executing in FEBio software and extracting outputs from Post-View software as visualized and tabled data.	3 July	16 July	2 weeks
4	Coding in MATLAB: <ul style="list-style-type: none"> • Operating Pre-View software in a non-interactive scheme, using MATLAB code. • Building and Executing FEBio input file inside MATLAB. • Extracting output data in an automatic way without using Post-View interactive features. • Comparing the results with reference data provided by IBEC. 	24 July	13 August	3 weeks
5	Finishing MATLAB code and drafting the report	27 August	31 August	1 week

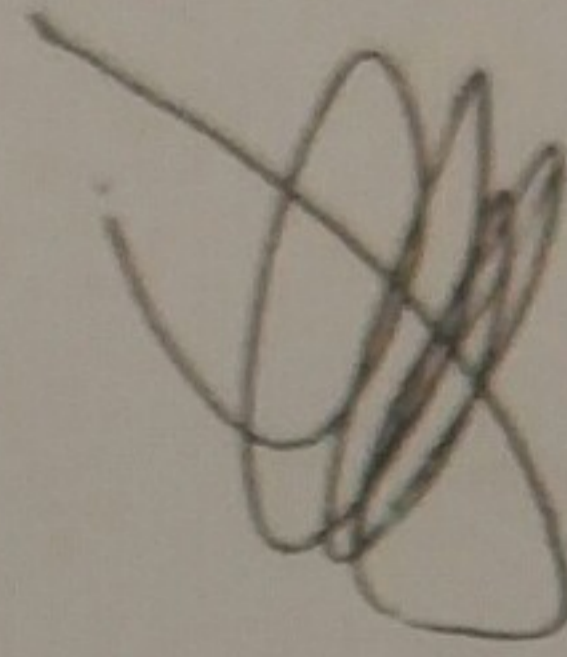
Barcelona, September 1st, 2017

Sincerely,

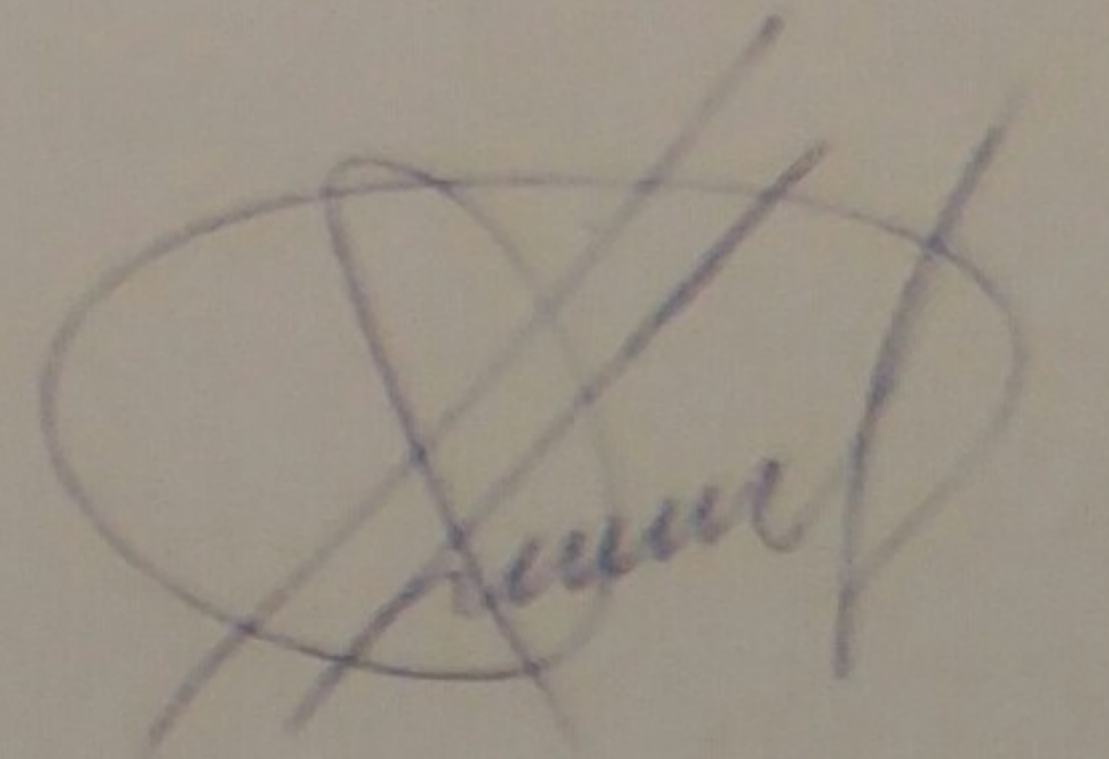
The external supervisors:



Prof. Marino Arroyo
UPC



Prof. Xavier Trepas
IBEC



Eng. Ernest Latorre
UPC/IBEC



UNIVERSITAT POLITÈCNICA DE CATALUNYA
BARCELONATECH
Department of Civil and Environmental
Engineering
Division of Mathematical and Computational Modeling

