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| E:\Data\Mine\MyInfo\Mansour\اسکن\مدارک شناسی،گواهی دوره ها و عضویت ها\3x4 - 2014-.jpg | **Mansour Torabi** | |
| **Phone:** +98-26-3619-7682  **Cell Phone:** +98-914-939-6981 | **E-mail:** [smtoraabi@ymail.com](mailto:smtoraabi@ymail.com)  [m\_torabi@alum.sharif.ir](mailto:m_torabi@alum.sharif.ir)  [LinkedIn](https://www.linkedin.com/in/mansour-torabi-b954b441/) |

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| **Education:** |
| * **2012-2015: M.Sc., Mechatronics Engineering**, [Sharif University of Technology](http://www.en.sharif.edu/) (SUT), * **Dissertation Title:** "*Impedance control of a knee rehabilitation exoskeleton using robust adaptive control*", Supervisor:[Dr. Gholamreza Vossoughi](http://sharif.edu/~vossough/)**,** * **Thesis Grade:** 19 / 20, **GPA:** 17.71 / 20 |
| * **2008-2012: B.Sc.,** Automotive Engineering, [Iran University of Science and Technology](http://www.iust.ac.ir/en) (IUST), * **Dissertation Title:** "*Multi-objective optimization of multi-layer acoustic panels using a genetic algorithm*", Supervisor:[Dr. Roohollahi Talebitooti](http://www.iust.ac.ir/page.php?slct_pg_id=13544&sid=16&slc_lang=en)**,** * **Thesis Grade:** 20 / 20, **GPA:** 18.38 / 20 |
| * **2004-2008:** High School Diploma, Major in Mathematics and Physics, * **GPA:** 19.87 / 20 |

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| **Work Experience:** |
| * **Head of Product Engineering Departments** * **Company:** [**MAPNA Group**](https://www.mapnagroup.com/en/) ([PARS](https://www.mapnagenerator.com/en/)), Detail Design Engineering Dept. [Apr **2022** to **present**] * **Experiences:** * Managing Prototype process for new products (Traction Motors, Alternators, Motor for EVs, Induction Motors) * Design and conducting Test process for new products * Engineering and Technical supporting for Procurements and Production in field of I&C and Electric part of Projects |
| * **Instrumentation Engineer** * **Company:** [**MAPNA Group**](https://www.mapnagroup.com/en/) ([PARS](https://www.mapnagenerator.com/en/)), Engineering and R&D Dept. [Apr **2017** to **2022**] * **Experiences:** * Instrumentation, Wiring, control/protection logic design for turbo-generators and auxiliary systems, electric motors and test stands. * Design and Preparation of technical documents: 3D Modeling and Drawings (CATIA), P&ID’s, Layout drawings (AutoCAD), Wiring and JB Termination diagrams (AutoCAD), IO List, Electrical Load List, Logic Charts, MTOs, Commissioning Manual, … * Field experiences including power plant commissioning as an Electrical and I&C engineer, Site surveys, Trip Tests |
| * **Mechatronic Engineer** * **Company:** [SDRA Co](https://sdra.co.ir/en/). (Knowledge-based Company) [Dec **2012** to Apr **2017**] * **Experiences:** * Electronic/Hardware design, PCB design (Altium Designer), MCU programming (C/C++), Windows software developing (C#) * Hands-on experience with different Digital Communication Protocols (Ethernet/RS-232/RS-485/Hart/I2C/SPI/CAN/USB), MCU-side and PC-side Programming * Great experience in Object Oriented Programming (C#), Multi-threading, IOs, Windows Forms, WPF, SQL,.. * Data Acquisition system design, (Hardware, MCU-side and PC-side Programming) * Vibration Monitoring System, (USB and Ethernet protocol, PC-side Software) * Online Air pollution monitoring for [Tehran Air Quality](http://airnow.tehran.ir/home/home.aspx) (Hardware/Software) |

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| **Teaching Experience:** |
| * **2023: SABALAN** Combined Cycle Power Plant**, Course Title:** "*Setting, Monitoring and Instrumentation of Turbo-generator*" * **2022:** [**MAPNA Group**](https://www.mapnagroup.com/en/) ([PARS](https://www.mapnagenerator.com/en/)), **Course title**: "*Programming with Python-scripting for ANSYS*" * **2022:** [**MAPNA Group**](https://www.mapnagroup.com/en/) ([PARS](https://www.mapnagenerator.com/en/)), **Course title**: "*Programming with MATLAB*" * **2015:** Exoskeleton Lab, [SUT](http://www.en.sharif.edu/), **Course Title:** "*Model-based design, Simulink Real Time, Embedded Systems*" * **2012:** [IUST](http://www.iust.ac.ir/en), **Course Title:** "*MATLAB and Simulink in engineering*" * **2011:** [IUST](http://www.iust.ac.ir/en), **Course Title:** "*Introduction to MATLAB and Simulink*" * **2008:** Private tutor**, Course Title:** "*Calculus*","*Discrete Mathematics*" |

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| **Honors and Awards:** |
| * **2022:** Selected as a Top Tutor in the MAPNA Pars * **2021**: Selected Work Group (as a Head of Work Group) for the Project: Design and Manufacture of InWheel Motor * **2018**: Published a text book in fields of “Programming in engineering” entitled “[How to Leverage MATLAB in Mechanical Engineering](http://dibagarantehran.com/route/?product=%d9%85%d8%aa%d9%84%d8%a8-matlab-%d8%a7%d9%87%d8%b1%d9%85%db%8c-%d8%a8%d8%b1%d8%a7%db%8c-%d9%85%d9%87%d9%86%d8%af%d8%b3%d8%a7%d9%86-%d9%85%da%a9%d8%a7%d9%86%db%8c%da%a9-%da%86%da%af%d9%88%d9%86%d9%87)”/ In Persian / Dibagaran Tehran Publications * **2014**: Exempted from Military Service - Selected as Exceptional Talent * **2012-**[**SUT**](http://www.en.sharif.edu/): Merit-based Admission Offer to **MSc Program**, Major in **Mechatronics**, (Selected as Exceptional Talent) * **2012-**[**IUST**](http://www.iust.ac.ir/en)**: Ranked First** among all undergraduate students, [School of Automotive Engineering](http://www.iust.ac.ir/index.php?slc_lang=en&sid=21), GPA: 18.38 / 20 * **2011,2010,2009-**[**IUST**](http://www.iust.ac.ir/en): Outstanding Student Award * **2009-**[**IUST**](http://www.iust.ac.ir/en): Ranked 3rd in Inter-University Mathematical Competition among all undergraduate students (Attended as freshman student) |

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| **Publications:** |
| * **2018:** [Book]Mansour Torabi, Ebrahim Nikghalb Rudsari, "[How to Leverage MATLAB in Mechanical Engineering](http://dibagarantehran.com/route/?product=%d9%85%d8%aa%d9%84%d8%a8-matlab-%d8%a7%d9%87%d8%b1%d9%85%db%8c-%d8%a8%d8%b1%d8%a7%db%8c-%d9%85%d9%87%d9%86%d8%af%d8%b3%d8%a7%d9%86-%d9%85%da%a9%d8%a7%d9%86%db%8c%da%a9-%da%86%da%af%d9%88%d9%86%d9%87)", Publisher: Dibagaran Tehran Pulicaions * **2017:** [Paper]Mansour Torabi, Mojtaba Sharifi, Gholamreza Vossoughi, "[*Robust Adaptive Sliding Mode Admittance Control of Exoskeletal Rehabilitation Robots*](http://scientiairanica.sharif.edu/article_4512.html)", Scientia Iranica. * **2015:** [Paper]Rooholla Talebi, Mansour Torabi**,** "[*Identification of tire force characteristics using a Hybrid method*](http://www.sciencedirect.com/science/article/pii/S156849461500650X)", [*Applied Soft Computing Journal*  (Q1),](http://scimagojr.com/journalsearch.php?q=18136&tip=sid) * **2014:** [Conference]Mansour Torabi**,** [Mojtaba Sharifi](http://www.ece.ualberta.ca/~tbs/pmwiki/index.php?n=Research.MojtabaSharifi), Gholamreza Vossoughi, "*Impedance control of a knee therapeutic robot to investigate the effect of patellar reflex*", *Proceeding of Iranian Conference of Medical Physics,* Tehran, Iran / In Persian. * **2014:** [Paper]Rooholla Talebitooti, Mansour Torabi, Reza Ahmadi, "[*Optimization of power transmission interaction of multilayered panel using genetic algorithm*](http://mme.modares.ac.ir/article-15-2625-en.html)", [*Journal of Modares Mechanical Engineering*](http://mme.modares.ac.ir/), / In Persian * **2013:** [Paper]M.H. Shojaeefard , Rooholla Talebitooti, S. YarmohammadiSatri , Mansour Torabi, "[*Enhancing Rollover Threshold of an Elliptical Container Based on Binary-coded Genetic Algorithm*](http://www.iust.ac.ir/ijae/article-1-178-en.pdf)", [*International Journal of Automotive Engineering*](http://www.iust.ac.ir/ijae/index.php?slc_lang=en&sid=1) * **2012:** [Conference]Abolfazl Khalkhali, Sina Samare Mousavi, Mansour Torabi,"*Multi-objective optimization of foam-filled thin-walled tubes for crashworthiness performance*", *Proceeding of* [*ISME*](http://www.isme.ir/)*-2012*, / In Persian. |

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| **Software Skills:** | |
| **Skill Levels:** **[E]**: **E**xpert, **[A]** **A**dvanced, **[I]** **I**ntermediate | |
| * **Technical Languages** * MATLAB-Simulink **[E]**, LabVIEW **[A]** * **Programming Languages** * C/C++ **[E]**, C# **[E]**, Python **[E]**, VBA **[A]** * *Database, Web:* SQL **[I],** HTML/CSS **[I]** * **Electronics and Digital** * *PCB Design:* Altium Designer **[E]** * *Micro-Controller:* * ARM - M3 & M4: Keil uVision **[E]** * AVR: Atmel Studio **[A]**, CodeVision **[A]** * *Electronic:* Proteus **[I]**, Multisim **[I]** | * **Mechanics:** * *CAD:* CATIA **[E]**, AutoCAD **[E]**, SolidWorks **[A]** * *FEM :* ANSYS **[A],** ABAQUS**[I]**   *- Multi-Body Dynamics:* ADAMS **[I]**   * **General software:**   MS-Office **[E]**, Windows **[E],** EndNote **[E]**, Photoshop **[A]** CorelDRAW**[A]** |

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| **Courses / Certificates** |
| 1. Train The Trainer / 2022 / QM ACADEMY / IR-TC/093058 |
| 2) Basic Operation Training – Electrical and I&C Part / 2022 / SIEMENS |
| 3) Explosive Atmospheres: Equipment – General requirements / EN 60079-0:2018 / 2021 / Nobel Academy / Ex-GN-1030 |
| 4) Explosive Atmospheres: Equipment Protection by flameproof enclosures “d”/ EN 60079-1:2014 / 2021 / Nobel Academy / Ex-Exd-1011 |
| 5) Explosive Atmospheres: Equipment Protection by increased safety “e”/ EN 60079-7:2015 / 2021 / Nobel Academy/Ex-e-1001 |

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| **Language Skills:** | |
| * **English:** Fluent | * **Persian** & **Kurdish :** Native |