**Linked in profile**

**Shahab Mansoor baghaei**

**Part time faculty at NYU, Industrial consultant at City College of New York** 09-2015 to present

**About**

I'm a Design Engineer with a Ph.D. in Mechanical Engineering. I have an extensive background in structural design of automobile solutions and mechanical elements. I really find joy in working on industrial projects for design and production. Over the years I have learned a lot of things regarding appropriate communication, negotiation, time management, collaboration, social skills, stress management, and implementing feedback from customers or quality controls. In addition, I am data scientist and familiar with Python, Jupyter and SQL. I performed many data science projects in Python and Jupyter which included data wrangling, exploratory data assessment and statistical analysis.

I'm dedicated to finding a solution. I built a strong foundation for serving as an information resource and point of resolution to my team members and clients. It is important to me to be a valuable contributor and I welcome overcoming challenges and collaborating on the team to achieve innovation. While the organization may grow and teams may change, my focus remains grounded in people. I look forward to many more years in this industry.  
  
I am focused on putting my passion and skills to good use. If you believe that I can help you, please get in touch or connect.

**Experience:**

-**Data science projects regarding data cleaning, statistical analysis, data modelling** 03-2022 to present

Problem statement of the project related to criteria for success, scope of the solution, analysis of constraints. Data wrangling, dataset preparation, data quality, data cleaning and data pre-analysis. Data exploratory analysis regarding plotting some graphs from dataset, analysis of columns and rows and statistical description of current data. Machine learning related to data modelling and prediction.

**-Part time faculty at NYU** 09-2015 to present

Achieve department objectives by developing course syllabi aligned with the institution’s mission, values, and program outcomes for Dynamics, Statics, Mechanics of Materials and Solid mechanics. Manage the scope of creating course schedules, learning activities, lecture materials, assignments, exams, and research projects. Provide consultations.  
✯ Improve results by setting high performance standards in the preparation of educational teaching and training aids including books, demonstration models, multimedia aids, tutorials, and reference works  
✯ Engage students by introducing complex material in creative ways to appeal to diverse audiences, resulting in improved understanding of highly technical concepts.

**-Adjunct professor at CCNY** 09-2015 to present

Giving lecture for Mechanical Engineering courses (Statics and Dynamics), Providing consultation for projects

**-Post Doctoral Researcher at CCNY** 10-2012 to 11-2017

Impact analysis, Safety and Crash Research Project   
✯Improved safety in automobiles by conducting research on analytical investigations of head impact mechanics during automotive accidents. Identified the impact force and deformation and other important quantities. Investigate the most common injury criterion in automotive safety called HIC. Highlighted the need to transition away from current HIC formula in a proposal to suggest new equation instead to circumvent the problem of inability to predict the injury prediction under some impact loads.

**-Design Engineer** 04-2009 to 08-2012

Achieved initiatives in improving efficiency, quality, and safety by leading a team of research and quality control in design, prototyping, testing, and production activities. Allocated resources across project deliverables While working closely with vendors and complying with industry/government regulations (APQP standards of Sazeh Gostar SAIPA (SGS)).

✯Boosted quality in the braking system performance with improvements made to the parking brake for vehicle in order to meet the standard requirements.

✯Material optimization by applying rationalization to develop functionality based on stakeholder feedback.

- **Design Engineer, Research and development** 09-2004 to 01-2008

Work collaboratively on the team to design mechanical parts and mechanisms for commercial vehicles and dynamics analysis.  
✯Specialized in the research and design of opener mechanism for engine hood of commercial transportation buses.  
✯Performed dynamics analysis of vehicles’ handling of light commercial vehicles under various driving conditions using FE model of leaf spring.

**Education**

Post Doctoral Fellow, Mechanical Engineering City College of New York (10-2012 to 11-2017)

**Skills**

Software (PYTHON, JUPYTER, SQL, SOLIDWORKS, ABAQUS, ANSYS)

Time management

Collaboration

Social skills