PARISA GOLKAR

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**EDUCATION**

**UC RIVERSIDE**

**BACHELOR OF SCIENCE**|**BIOENGINEERING**  2021

* Completed all the requirements for Bachelor of Science (Only 2 hours of school per week)
* University can confirm graduation date if needed

**Related Coursework:** Tissue Engineering, Engineering Circuit Analysis,Statistical Quality Control, Quantitative Biochemistry, Organic Chemistry, Biomechanics,Manufacturing Processes, Probability & Statistics for SCI & ENGR, Biotechnology and Molecular Engineering, Circulation Physiology, Biomaterials, Bioinstrumentation, Biosystems,Process improvement strategies,CAD systems,Knowledgeable of quality control standards follow to ISO9000

**LEADERSHIP & ENGINEERING & INTERNSHIP EXPERIENCE**

**RESEARCH INTERN** |**UC RIVERSIDE** DEC 2020-PRESENT

* large-scale simulations of emerging genome editing technologies and CRISPR systems applying computational methods
* Develops cryo-EM refinement methods based on high-level quantum mechanical simulations and free energy methods

**Alerting Acoustic detecting Helmet Project Manager**|**UC RIVERSIDE** SEP 2020-PRESENT

* Project management works on a cross-functional project team through all phases of the product development process, works collaboratively with internal and external teams to ensure successful project outcomes
* Lean manufacturing, Plans, organizes, and directs the completion of the project while ensuring the project’s on time, on budget, and within scope
* Problem solving and 3D Designs Experiment , Performs verification and validation experiments & statistical process control testing
* Investigates the regulatory requirements for the proposed device under the FDA draft guidance, and overseeing product trials and regulatory inspections
* Extracts vehicle sounds from traffic using Machine Learning: Convolutional Neural Network,and obtain the characteristic profile of audio waveforms

**CONTROL THEORY MODEL OF TAH Lead Engineer student** |**UC RIVERSIDE** JAN 2020-APR 2020

* Designs experiment, Simulates Total artificial heart control system using COMSOL, Analyzing data, compiling, applying all the parameters to mimic the functional aspects of the TAH, documenting and communicating test results to the broader team

**CIRCULATION PHYSIOLOGY PROJECT DESIGN**|**UC RIVERSIDE** JAN 2020-MAR 2020

* Leads the team to simulate the Cerebrospinal Fluid Flow in the cranial cavity with Great knowledge of materials used for fluidics in medical device industries
* Models Aqueduct of Sylvius on COMSOL, and SOLIDWORKS and Fluidic system analysis and Design

**Interventional Cardiologist Shadowing**|**TEHRAN HEART CENTER, IRAN** MAY 2020-SEP 2020

* Develops an insight into the field of Cardiac Catheterization and identified most efficient solutions to complex engineering problems
* Gains clinical experience through interacting with patients, engaging in diagnoses, working in Cath Lab

**BIOMECHANICS PROJECT DESIGN Test Engineer** |**UC RIVERSIDE** SEP 2019-DEC 2019

* Tests all aspects of the system like function/component, system, performance and the stress applied to carbon fiber running specific prosthetics with FEM
* Design the 3D prosthetic using COMSOL & conduct calculations to apply all material properties
* Performs pilot testing to determine the validity of the design through the manufacturing process, report out, review test results, design review and validation

**QUALITY ENGINEER INTERN** |**PASARGAD IRANIAN Ink, IRAN**  JUN 2019-AUG 2019

* Assists Quality Engineer management & other functional managers to implement and develop process & product improvements,Assists in the validation and verification efforts, Design and implementation of automated tests which reduced testing time by 30%
* Familiar with Maintaining, reviewing, and Filing cGMP documentation such as Batch Production and Packaging records,(SOP),technical reports,Logs, Calibration records

**RESEARCH INTERN**|**NANO ALVAND PHARMACEUTICALS** JUN 2018-AUG 2018

* Develops assays for the quantification of oligonucleotides in biological matrices
* Designs protocols and analyzed assay data and Utilize instruments to measure fluorescence of oligonucleotides

**RESEARCH INTERN**|**ACECR-SHARIF BRANCH** JUN 2017-AUG 2017

* Tests derivatives of ascorbic acid for their ability to inhibit glycolytic enzymes
* Prepares buffers and assays to measure enzyme inhibition & Analyzed absorbance of enzyme activity and provided weekly data

**SKILLS**

* **SOFTWARE:** SOLIDWORKS,COMSOL, MATLAB, C++, P-SPICE, Benchling,CRISPR,SPC,Six Sigma,MS Office,MS Office Project,LINUX OS,Python,Mini-Tab
* **LABORATORY:** Cell culture, Thin layer chromatography, C-13 NMR, 1H NMR, IR, Mass spectroscopy, ELISA,Western Blot,PCR,Gel electrophoresis,Flow cytometry,Mass spectroscopy,CGMP,High-Performance Liquid Chromatography,Root cause analysis,PCB