Parvin Navaeipour, PhD; Tel: 343-989-0148 • Email: p.navaeipour@queensu.ca

Skills

- Strong analytical and mathematical skills
- 10 years of demonstrated independent and collaborative research experience
- Proficient in programming and numerical modeling using Fortran, Python, and Matlab.
- Expertise in developing applications using JavaScript, HTML, React, React-Hooks, CSS.
- Experienced in using Machine Learning, Data Visualization, NodeJs, Maple
- Experience working with multiprocessing and parallelized code
- Effective writing and technical presentations skills, experienced in team work

Experience

- **Scientific Application Developer @ Kings Distributed Computer Labs   Sep 2019 to Jun 2020**
    - Ported mathematical functions and classes from Python to JavaScript to develop an application that demonstrate the Sawtooth oscillation in tokamak fusion reactors
    - Ported mathematical functions from Matlab to JavaScript to develop an application which is used to show the magnetic confinement fusion

- **Doctoral Researcher @ Queen's University   Jan 2015 to Sep 2019**
    - Modelling carrier dynamics in 2D materials
    - Modelling nonlinear response of 2D materials in waveguide geometries
    - Numerical analysis of microscopic scattering processes on nonlinear response of 2D materials
    - Analytical & numerical response of monolayer graphene to terahertz radiation via length gauge & velocity gauge

- **Research Assistant @ Tabriz University   Sep 2009 to Jul 2012**
    - Numerical analysis of quantum dot lasers
    - Numerical analysis of multi quantum well Superluminescent diodes

Education

Ph.D., Physics   **Jun 2019**
Queen's University, Kingston, ON, Canada
Thesis: *Nonlinear Response of Monolayer Graphene to THz Frequency Radiation*

M.Sc., Physics-Photonics   **Jan 2012**
University of Tabriz, Tabriz, Iran

B.Sc., Physics   **Sep 2009**
University of Tabriz, Tabriz, Iran

Projects

https://github.com/parvinnavaeipour/titanic-Macine-Learning-from-Disaster
https://www.kaggle.com/c/competitive-data-science-predict-future-sales

Training and Professional Development

- **Python for Data Science and AI**

  Issuing Organization: IBM;

- **Intro to SQL, Advanced SQL, Pandas, Data Visualization, Intro to Machine Learning, Intermediate Machine Learning**
  Issuing Organization: Kaggle; Issue Date: May 2020;

- **Python**
  Issuing Organization: IBM; Issue Data: April 2020; Badge URL: https://www.youracclaim.com/badges/1215f8fe-a6b8-4edc-9a6d-5ff8df045421/public_url

- **Machine Learning**
  Issuing Organization: Coursera; Issue Date: April 2020; Credential ID: 5FXTRGQ3WZ9E; Credential URL: https://www.coursera.org/account/accomplishments/certificate/5FXTRGQ3WZ9E