Payam Nikdel

Research Assistant
Simon Fraser University
Email: pnikdel[at]sfu.ca
Website: http://nikdel.tk/

Education

- **Simon Fraser University (SFU)**　　　　　　　　　　　　　　　Burnaby, Canada
  M.Sc. Computing Science　　　　　　　　　　　　　　　　　　*2016 - Present time*
  - Thesis (M.Sc.) in computing science (Robotic, Artificial Intelligence)
  - GPA: 4.33/4.33; Expected Graduation: May 2018
- **Shiraz university**　　　　　　　　　　　　　　　　　　　　Shiraz, Iran
  B.Sc. Computer Engineering(Software engineering)　　　　　　　*2010 - 2014*
  - GPA: 17.82/20; Achieved the highest GPA among all B.Sc students.

Work Experience

- **System Developer in the IT section**　　　　　　　　　　　　Tehran, Iran
  Petro Gas Jahan Engineering company　　　　　　　　　　　*May. 2015 - Apr. 2016*
  - Improved the company network performance and contributed in developing software.
- **Android application and web development**　　　　　　　　　Tehran, Iran
  Cafebazaar (a famous reputable App store in Iran)　　　　　　*Apr. 2012 - Sep. 2012*
  - Participated in creating the Divar Android application and the Divar website using Django.
- **Translator Software**　　　　　　　　　　　　　　　　　　Tehran, Iran
  Text processing Lab at University of Tehran　　　　　　　　　*Sep. 2011 - Jan. 2012*
  - Participated in making an English to Persian translator using C++ language.

Awards, Grants & Honours

Graduate

Fellowship and RA/TA position from The Simon Fraser University 2016
RA/TA position from The University of Alberta 2016
Fellowship and RA/TA position from The University of Victoria 2016

Undergraduate

Ranked 1st in Computer Engineering students 2014
Awarded as the Best Undergraduate Student in Computer Engineering 2014
Ranked 18th in Iranian National Computer Olympiad for university students. 2014
Ranked 4th in Kashan ACM competition among all national universities. 2011

Selected Projects

- **Daydream Ant Algorithm**　　　　　　　　　　　　　　　　Fall 2016
  Dr. Richard Vaughan

  Presented a new approach based on SO-LOST algorithm by adding a thinking part. Daydream algorithm will reduce the path-finding time and it will guarantee to find an optimal path.
- **Person Re-identification Using Point-cloud images**　　　　　Fall 2016
  Dr. Greg Mori

  Enhanced and compared several deep-learning approaches for identifying people using 3D point cloud data.

- **Control the mouse cursor with eyes or hands** — Fall 2014
  Dr. Zohreh Azimifar
  Built two application using OpenCV to control the mouse pointer by tracking the user's eyes or hand (two separate applications).

- **3D Multiplayer Game With AI** — Spring 2014
  Dr. Farshad Khunjush
  Developed a first person shooter online multiplayer game using Unity game engine with the capability of over 100 simultaneous players and created a simple AI for enemies in the single player mode.

- **Making two player 3D game in DirectX** — Fall 2013
  Dr. Reza Rohani
  Created a simple two player shooter game using DirectX.

- **GPU Efficient Image Processing** — Fall 2013
  Dr. Farshad Khunjush
  Utilized GPU to apply filters on high resolution images on CUDA platform.

- **Pure P2P File Sharing Application Written in Python** — Spring 2013
  Mr. Morteza Tajbakhsh

Technical Skills

- **Programming Languages:**
  - ○ Python   ○ C   ○ Java   ○ C++   ○ C#   ○ SQL

- **Programming Platforms & Framework:**
  - ○ UNITY   ○ STAGE   ○ ROS   ○ ANDROID   ○ OPENCV
  - ○ OPENCL   ○ HIBERNATE   ○ GIT   ○ LATEX   ○ CUDA

- **Web Development:**
  - ○ J2EE   ○ HTML   ○ CSS   ○ JAVASCRIPT   ○ DJANGO

- **Operating System:**
  - ○ Windows   ○ Linux

Selected Teaching Experiences

- **Computing Laboratory** — Simon Fraser University
  Teaching Assistant to Dr. Richard Vaughan — *Fall 2016*
- **Intro.Cmpt.Sci/Programming II** — Simon Fraser University
  Teaching Assistant to Dr. Bobby Chan — *Fall 2016*
- **Digital Design** — Shiraz university
  Head Teaching Assistant to Dr. Farshad Khunjush — *Fall 2014 & Spring 2014*
- **Artificial Intelligence** — Shiraz university
  Teaching Assistant to Dr. Zohreh Azimifar — *Spring 2014 & Fall 2013*
- **Advanced Programming** — Shiraz university
  Teaching Assistant to Dr. Ali Hamze — *Fall 2013*
- **Data Structures And Algorithms** — University of Tehran
  Teaching Assistant to Dr. Hesham Faili — *Spring 2013*
- **Fundamentals of Computer Programming** — University of Tehran
  Project Manager to Dr. Hashemi and Dr. Hadi Moradi — *Fall 2012*

References

- **Dr. Richard Vaughan** — Simon Fraser University
  M.Sc. Supervisor — *vaughan@sfu.ca*
- **Dr. Farshad Khunjush** — Shiraz University
  Undergraduate Supervisor — *khunjush@shirazu.ac.ir*