Soroush Gharehbaghi

09125842975 • soroush.gharehbaghi@gmail.com

EDUCATION

Bachelor of Science, Computer Engineering
Iran University of Science & Technology (IUST), Tehran, Iran
Bachelor of Science, Computer Engineering
Iran University of Science & Culture (USC), Tehran, Iran
Master of Science, Computer Engineering
University of Tehran (UT), Tehran, Iran

SPECIALIZED SKILLS

Programming:	*Proficient:* C, C++, Objective C, Assembly (x8086) , AVR(Microprocessor) , Machine Vision(OpenCV), Java(Processing).
Softwares:	VVVV, Touchdesigner, Resolume Arena, MaxMSP, Processing, MadMapper, Arduino/Processing.
	Familiar: Java, JS, Actionscript, OpenGL, Openframeworks, Prolog.
Software engineering:	Object-Oriented, ,OpenCV, FPGA Programming, Structured, UML, ER.

RELEVANT EXPERIENCE

Research Activities

- Implemented and programmed methods in motion detection & motion tracking
- Developed a new method for brain segmentation using magnetic resonance head images(MRI)
- Implemented and programmed an automated method for segmenting magnetic resonance head images(MRI)
- Studied and implemented methods for Maze solution algorithm using C programming language
- Research assistant on artificial neural networks and case-based reasoning in the field of machine learning
- Performed implementation for estimating distance using AVR microcontrollers
- Investigated on the fields of Business process reengineering (BPR) and Business Process Management (BPM)
- Research assistant for large scale implementations of spiking neural networks on FPGAs

Teaching Activities

Machine code(x8086) & Assembly Language(T.A), Computer Engineering Department	Jan 2011-April 2011
Integrated Circuits & Microprocessor(T.A), Computer Engineering Department	Jan 2012-April 2012
Interactivity Design(workshop), Computer Engineering Department	Jan 2013-April 2013

Other Activities

Ranked 7'th in Iran National Math Olympiad(3rd Round)	2004
Ranked 3'rd in Sharif Cup Robotics(Machine Vision)	2012
4'th place in Amirkabir Artificial Intelligence-AAIC contest	2012
3'rd place in ACM ICPC regional contest	2012
Attended in Amirkabir-Kharazmi's robotic contest, micro-mouse section	2011
Attended & completed Sharif Cup Machine Vision summer school succesfully	2015
Signaling Protocols Technician at ISIRAN Institute	2008
Access Systems Technician at ISIRAN Institute	2008
Ranked 1'st in ICG(Iran Cyber Games) as team member of CS clan(3S[!Ce])(Tehran)	2004
WCG(World Cyber Games) qualifier az team member of CS clan(3S[!Ce])(Korea)	2005
Sound Installation: Mohsen Art Gallery	2012
Installation: Shirin Art Gallery	2012
Audio/Visual Performance: TADAEX(Tehran Annual Digital Art Exhibition).	2014
Audio/Visual Performance: Iranian Academy of The Arts.	2015

- Audio/Visual Performance: Sayeh Art Gallery   2015
- Installation: Shirin Art Gallery   2016
- Dastan's basement: Audio/Visual performance   2017
- TADAEX(Tehran Annual Digital Art Exhibition)Technical manager.   2012
- TADAEX(Tehran Annual Digital Art Exhibition) Selected project.   2013
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- TADAEX(Tehran Annual Digital Art Exhibition) Selected project.   2016
- TADAEX(Tehran Annual Digital Art Exhibition) Lecturer.   2017
- TADAEX(Tehran Annual Digital Art Exhibition) Selected project.   2018
- NeoShibuya(Tokyo, Japan) Selected project.   2018
- LightBox NYC(New York City, us) Selected project.   2019

Work Experience

Tak-on creative studio   2018-2019

- Design & implementation of audio/visual performances

Daarvag International Advertising Agency   2016-2017

- Multimedia/Interactive content provider

Knauf Iran Group(Gatchson Co)   2009-2014

- Performance consultant for web-based content delivery

ISIRAN Institute
                                                                                             2009-2011
- Design & programming software for local Access Systems.

Nasrpardaz Co.

- Media sharing and content delivery with DSpace and Mediawiki, Various Localization projects   2008-2010

Projects:

AHANGAPP

Product Design | UI & UX Design | Mobile Application | Web Application
Ahangapp is an online music streaming application developed for ios/android devices. Powerful dedicated music streaming web API backs this application. Also, we Ahangapp comes with a web panel for managing music databases.
Primary Features:
• Live search for music based on artist, song and album info
• Online adaptive streaming
• User playlist and library
• Offline mode
• Up to date music library
• Web panel for managing music database and applications users

Technologies: React Native / ReactJS / PHP

NINX

Product Design | UI & UX Design | Mobile Application
NINIX is a health monitoring gadget for babies. With iOS/Android applications, you can monitor the baby's heart rate, diapers, and condition.
Primary Features:
• Gadget manufactured using nrfConnect Bluetooth BLE 4.1
• Native Android and iOS apps, connecting to the device using Bluetooth
• Push notification based on a signal from the Ninix device

Technologies: Python Django (DRF - Django Rest Framework), Swift, Android/Java, Postgres

BASIR

Product Design | UI & UX Design | artificial intelligence | Mobile Application | Web Application
Albasir a symptom checker mobile application with a set of virtual eye tests, developed for iOS and Android devices.
Primary Features:
• Symptom checking algorithm using Machine Learning and Deep Learning techniques
• Virtual eye tests for Astigmatism, Refractive Errors, Cataracts, etc.
• Database for symptoms and diseases
• Developed for different languages including English and Arabic

Technologies: React Native / Python / ReactJS / Postgres, Docker, Deep Learning – Tensorflow

WEDIO

Product Design | UI & UX Design | Mobile Application | Web Application
Wedio is a video streaming platform, powered by HLS streaming, offering a scalable and maintainable solution. Wedio has a web panel for monitoring services and SDKs for Android/iOS devices.
Primary Features:
• Streaming multimedia content using HTTP Live Streaming
• Web admin panel for monitoring the services and uploading content
• SDKs for mobile devices and Rest API

Technologies: React Native / ReactJS / PHP

PM DESIGN

Services: Product Design | UI & UX Design | Web Application

Technologies: Python, Django, Docker PostgreSQL

designed and implemented an interactive web application for project management with monitoring and reporting capabilities for PM Design, one of the biggest constructional companies located in North America.

primary features:
Primary Features: • Creating a project and sub-project
• Creating users with different access level
• Management dashboard and presentation summary report
• Creating Gantt charts and setting the timelines of tasks
• Informing the users by notification capabilities
• Determining the costs related to each sub-project individually
• Taking notes and sharing them with other users

IREEN

Services: UI & UX Design | Artificial intelligence | Web Application

Technologies: Tensorflow2,Keras, django, TensorflowServing, reactJS

IREEN is an automated real estate price estimation service based on property images powered by Deep Learning techniques. We estimate the price of a property with maximum accuracy using the following information:
primary features:
• Structural attributes like area, number of bedrooms
• Accessibility of neighborhood measured by the number of supermarkets, shops, restaurants near the property
• Aerial image of the region
• Interior and exterior pictures of the house
Provide a visual desirability index for each photo of the property. Our underlying deep neural network technology has a precise understanding of visual features that correlate with value and perceives the gradients in quality that exists among them.

BATTLE OF CASTLE

Product Design | UI & UX Design | Mobile Application

Technologies: Unity

AIt's the strategy game and develops for the android and ios platforms. You need the ground to station your troopers. Touch the space between two wooden sticks and connect them with a rope. Just like a dots and box game. Now it's time for your enemy to make a move. You must select one of these five armies and make a strong castle for your clan.