Sina Masnadi

✉ masnadi@cs.ucf.edu

EDUCATION

2015 – Aug2020 (expected)	**Ph.D. in Computer Science,** *University of Central Florida* Research Interests:

- Human–Computer Interaction
- Computer Vision
- Computational Geometry
- Machine Learning

2010–2015	**B.Sc. in Computer Science,** *Sharif University of Technology*: Top Rank University in Iran

WORK EXPERIENCE

Jun2016–Aug2017 — Full-stack Developer at Career Fair Plus

Developed web-services using Node.js, MongoDB, Heroku, AWS, and Angular JS. Among my responsibilities, I was in charge of transforming the traditional servers to cloud services using Node.js and AWS (Lambda, S3, and EC2). I also helped with Android app development by integrating Google Firebase services for user profile management.

Dec2012–Aug2015 — Android Developer at Cafe Bazaar

Cafe Bazaar is the largest private mobile software company in Iran. I worked on its main product, called "Bazaar", which is an Android application marketplace (similar to Google Play) for Iranian smartphone users. Currently, it has more than **36 million** active users. Some of my collaborations in this company are as follows:

- UI/UX design based on persona, scenario, and goal
- Creating an Android image caching system (this happened before Fresco, UIL, Picasso, and other libraries become popular)
- Design and implement server/client data transfer protocols and structures
- Improving UX using user study, A/B testing and data analytics
- Implementing root installation for apps. Automatic update of installed apps which mimics Google Play and App Store
- Collaborating in implementing apk delta update (Update Android apps by their diff)

2013–2018 — Co-founder at Ghabzak – Startup

An Android application for paying bills.

2013–2017 — Creator of WallpaperHaa

An Android wallpaper application with more than 300,000 active users.

2010–2011 — Freelance Web Developer

- Creating e-commerce websites for two incorporations
- Creating a website for Sharif University Linux workshop

ACADEMIC PROJECTS

Current	NSF NRI - Sketching Geometry and Physics Informed Inference for Mobile Robot Manipulation in Cluttered Scenes, *Supervisor:* Dr. J.J. LaViola
2017	Single view 3D model reconstruction, *Supervisor:* Dr. H. Foroosh
GLOBECOM 2017	Investigating the Value of Privacy within the Internet of Things, *Supervisor:* Dr. D. Turgut
2017	A new parallel approach to Convex Hull problem, *Supervisor:* Dr. D. Dechev
2016	Creating Depth of Field Effect, adaptive level of detail, and selection and manipulation in VR Environment using Eye-Tracking in Oculus Rift and Kinect, *Supervisor:* Dr. J. J. LaViola
2016	A Fruit Ninja game using Microsoft Kinect as the input device for gesture recognition . The player can control the sword and do other body gestures to grab objects and move around , *Supervisor:* Dr. J. J. LaViola

2016	A Star Wars game using Microsoft Kinect as the input device for gesture recognition . The player can control the light saber and do other gestures to grab objects , <u>Demo</u>, *Supervisor:* Dr. J. J. LaViola
2015	Recreating MiniSAT SAT solver using Java, *Supervisor:* Dr. S. Jha
2014	Recreating Bertrand competition model using Vensim and NetLogo, *Supervisor:* Dr. R. Ramezanian
2014	Studying an economic problem caused by certain laws using Vensim, *Supervisor:* Dr. A. Mashayekhi
2014	Creating an example of PPTP VPN (client/server) using Java , *Supervisor:* Dr. R. Ramezanian
2013	Research involving Multimedia Datamining, *Supervisor:* Dr. M. Madani
2013	Creating a chatroom project for several end users with file tranfer support, *Supervisor:* Dr. R. Ramezanian
2013	Creating a full example of an FTP server/client, *Supervisor:* Dr. R. Ramezanian
2012	Simulating a simple ecosystem of creatures with the rules of Operating Systems *via* MATLAB, *Supervisor:* Dr. A. Zarei
2011	Designing a web-based game using servlet (Apache Tomcat), JS, and HTML, *Supervisor:* Dr. A. Zarei
2011	Building a simple P2P file transfer system in Java, *Supervisor:* Dr. A. Zarei
2011	Recreating a complete form of the Pac-Man game in Java including the AI for the ghosts, *Supervisor:* Dr. A. Zarei
2010	Creating a complete game of chess using Java, *Supervisor:* Dr. A. Zarei

COMPUTER SKILLS

Programming	Java (7 years), Android (6 years), Node.js (3 years), C++ (4 years), AngularJS (3 years), JavaScript (7 years), Django (1 year), Python (4 years), C# (4 years)
OS	Proficiency with Unix based operating systems and Windows
Modeling	Vensim, NetLogo, AutoCAD
Development	Agile Development, Git, Jira, Phabricator, Scrum, Squad
Other	Unity 3D, Matlab, LaTeX, Gradle, Bootstrap, Adobe Photoshop, Adobe Illustrator

SELECTED COURSES

2017	3D Computer Vision by Dr. Hassan Foroosh
2017	Advanced Artificial Intelligence by Dr. Lotzi Boloni
2017	Multicore Programming by Dr. Damian Dechev
2016	Parallel Architecture and Algorithms by Dr. N. Deo
2016	3D User Interfaces for Games and Virtual Reality by Dr. J. J. LaViola
2016	Advanced Machine Learning by Dr. F. Liu
2015	Design & Analysis of Algorithms by Dr. S. Jha
2015	Network Optimization by Dr. N. Deo
2013	Computer Networks by Dr. R. Ramezanian
2012	Operating Systems by Dr. A. Zarei
2012	Android Development by Dr. H. Malek