# Parsa KamaliPour | CV

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## Education

**Vali-e-Asr University of Rafsanjan** **Rafsanjan, Iran**
*B.Sc. Computer Engineering, GPA: 16.60/20 (3.42/4) with 105 credits passed* *2018–Present*

- Thesis: To Be Expected, It's about Community Detection.
- Focus: Software Engineering.
- Expected GPA at graduation: 17 out of 20 (3.58/4)
- GPA over the past year: 3.62/4.00 (semesters: Spring 2021, Summer 2021, Fall 2021)
- University's average GPA: 14.12/20, Computer Engineering's average GPA: 14.35/20

## Publications

- **Fahimeh Dabaghi-Zarandi, Parsa KamaliPour. Community detection in complex network based on an improved random algorithm using local and global network information. Journal of Network and Computer Applications, 2022** : (In Review), Q1, Impact factor: 6.281

## Experience

### Research

**Undergraduate Research Assistant** **Rafsanjan, Iran**
*Department of Computer Engineering, Vali-e-Asr University of Rafsanjan* *Aug 2021–Present*

- Supervisor: Dr. Fahimeh Dabaghi-Zarandi
- Field: Community Detection
- My responsibilities include: Reading and reviewing other related papers, Implementing the idea, Testing and improving the written code, gathering information and writing the initial text for the paper

### Teaching

**Undergraduate Teaching Assistant** **Rafsanjan, Iran**
*CE Department, Vali-e-Asr University of Rafsanjan* *Mar 2021–Present*

**Introduction to Information Retrieval**
*Dr. Mojtaba Sabbagh-Jafari, Role: solo TA (Spring 2022)*

**Design and Analysis of Algorithms**
*Dr. Fahimeh Dabaghi-Zarandi, Role: Head TA (Spring 2022, Fall 2021, Spring 2021)*

**Data Structures**
*Dr. Fahimeh Dabaghi-Zarandi, Role: Co-Head TA (Spring 2022), Head TA (Fall 2021, Spring 2021)*

**Discrete Mathematics**
*Dr. Fahimeh Dabaghi-Zarandi, Role: TA (Fall 2021, Spring 2022)*

**Operating Systems**
*Dr. Fahimeh Dabaghi-Zarandi, Role: Grading TA (Spring 2022)*

### Industry Work

**Team Co-Founder & Game Developer**
*Null References, Indie Game Development Team* *Feb 2020–Present*
- **Uncertainty project**

## Research Interests

- Algorithm Design
- Community Detection
- Graph Theory
- Game Theory
- Randomized Algorithms
- Data Science

## Selected Relevant Coursework

**Fundamental of Programming**: 20/20
**Theory of Machines & Languages**: 17.9/20
**Digital Logic Design**: 19.45/20
**Software Engineering**: 18.75/20
**Software Engineering Lab**: 20/20
**Information Retrieval**: 18.5/20
**Artificial Intelligence**: 16/20
**Advance Programming**: 16.5/20
**System Analysis and Design**: 20/20
**Design and Analysis of Algorithms**: 18/20
**Computer Architecture**: 18.97/20
**The principles of Compiler Design**: 20/20
**Programming Language Design**: 18/20
**Database**: 16/20

## Honors and Awards

**Among the top 10 undergraduate students of Computer Engineering**
*Vali-e-Asr University of Rafsanjan, Entrance Year of 2018* *2018–Present*

**Faculty of engineering Exceptional Talent student for 3 semesters**
*Vali-e-Asr University of Rafsanjan*
as a result of obtaining a GPA of over 17.00/20.00 (4/4)
- Fall 2021 - GPA: 17.14/20.00
- Spring 2021 - GPA: 18.15/20.00
- Fall 2020 - GPA: 17.08/20.00

## Test Scores

**TOEFL**: Not taken yet
**GRE**: Not taken yet

## Extra Curricular Activities

**Member Of Scientific Staff**
*Computer Engineering Scientific Association* *May 2019–Jun 2021*
Vali-e-Asr University of Rafsanjan

**Member of Executive Staff**
*Video Games Association* *Oct 2020–Jun 2021*
Vali-e-Asr University of Rafsanjan

## Selected Projects

**The database of a music streaming service similar to Spotify.**
*One project regarding to the Database course* *Fall 2021*

**Uncertainty project: a project aims at creating a new game**
*Null References* *Feb 2021–Present*

- Uncertainty is an action-adventure space-shooter game, and currently It's under development.
- We have used the beta version of this game as our "Software Engineering Lab" course project.

**Designing and implementation of The blocked sort-based indexing algorithm**
*One project regarding to Fundamentals of Information Retrieval course* *Spring 2021*
for indexing large documents on the disk

**The solution and It's implementation of the Closest Pair of Points Problem**
*One project regarding to Design and Analysis of Algorithms course* *Fall 2020*
using Divide and Conquer method

**Designing and implementation of:**
*Multiple projects regarding to Data Structures and Algorithms course* *Fall 2019*

- the Red-Black Tree , the AVL Tree , the Trie Dictionary , the Sparse Matrix via Linked List , the Rat in the maze problem

## Computer skills

**Game Development**: Unity

**Frameworks & Libraries**: Qt, Numpy, Pandas, Matplotlib

**Tools**: Jupyter Notebook, LaTeX, Git, Markdown

**Programming Languages**: C, C++, Python, MATLAB, C#, Java, SQL

**Software Engineering**: Refactoring , Debugging, Unit Testing, Agile mythology

**Others**: Linux, MS Office, Research & Searching ability

## Languages

**Persian**: Native language

**English**: Fluent *Professional working proficiency*

## References

**Dr. Fahimeh Dabaghi-Zarandi** **Rafsanjan, Iran**
*Assistant Professor, f.dabaghi@vru.ac.ir*
Department of Computer Engineering, Faculty of Engineering, Vali-e-Asr University of Rafsanjan

**Dr. Mojtaba Sabbagh-Jafari** **Rafsanjan, Iran**
*Assistant Professor, mojtaba.sabbagh@vru.ac.ir*
Department of Computer Engineering, Faculty of Engineering, Vali-e-Asr University of Rafsanjan

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