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Iran

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Summary

I'm AmirReza PourAkhavan, Software Engineer, Senior Competitive Programmer, Algorithms and Data Structures Expert, and Instructor.
I advanced to International Collegiate Programming Contest World Finals twice and placed in the top 0.03% of 200,000 programmers who participated.
I am a judge at many international programming competitions.

I have experience in:
- Problem Solving, Algorithms, and Data Structures
- Algorithms, and Data Structures Teaching
- Authoring tasks and preparing world-class programming contests
- Software Engineering in C++ and Python

Experience

🔲 Founder

Algoritmi Academy

Sep 2023 - Present (3 months)

We are a dedicated team of Iranians passionate about sharing our experience in competitive programming. We advocate for personalized private classes with smaller groups, recognizing that everyone has a unique learning style and pace. Our educators are not only experienced but also adept at tailoring their methods to best suit each student. With backgrounds in both competing and coaching at the Iranian and International Olympiads in Informatics (IOI), we have witnessed the profound impact competitive programming can have on an individual.

Till now, I organized an 11-day online camp for Uzbekistani teams going to participate in the ICPC semi-finals. We are holding some private one-by-one sessions with other people too. Including a private session with a gold medalist going to participate in IOI.

🔲 Algorithm, Data Structures and Programming Teacher

Distinction and Creativity Agency - Syria

Jul 2023 - Jul 2023 (1 month)

I held a one-week camp for Syrian team going to IOI.
The camp was hosted by the Distinction and Creativity Agency (DCA). They tried out of their capacity to host the event as best as possible.
Almost all of the members of the Syrian team were super intelligent but without much knowledge. This is normal for a country without an Olympiad system and structure.
Because of that, I tried to cover as many topics as possible in the camp. To name some, I can mention geometry, tree data structures, and sqrt decomposition.

🔳 Contest Coordinator

LeetCode

Jan 2023 - Present (11 months)

LeetCode, recognized as the third-popular tech platform for engineers preparing interviews globally, entrusts me with the pivotal role of Contest Coordinator. In this capacity, I serve as the essential gatekeeper for every problem and contest that goes live on the platform. Our contests have about 20k participants. My responsibilities are multi-faceted and critical for ensuring the highest standard of content:

- Unique Problem Evaluation: I meticulously evaluate problem ideas to ensure their uniqueness and relevance, contributing to the platform's innovative edge.
- Guiding Problem Adders: I oversee a team of Problem Adders, providing guidance on problem preparation. This includes maintaining the quality of problem descriptions and ensuring the robustness of test cases.
- Contest Problem Selection: I strategically select a diverse mix of problems for contests, balancing difficulty levels and topics to challenge and engage our global community of coders.
- Team Leadership: My role demands a deep understanding of algorithms and data structures, coupled with the leadership skills necessary to manage and inspire a team of approximately 20 contractors. This position not only underscores my technical proficiency and strategic thinking but also highlights my ability to lead and collaborate effectively within a high-stakes, fast-paced environment.

Algorithm, Data Structures and Programming Teacher

AE High School

Sep 2017 - Present (6 years 3 months)

AE High School, renowned as one of Iran's premier educational institutions, boasts a distinguished record of securing numerous gold medals in both National and International Olympiads annually. This achievement underscores the school's commitment to excellence and its position as a leader in academic innovation.

In this stimulating environment, I have had the privilege of teaching a generation of bright minds, imparting knowledge and skills crucial for their academic and future professional successes. My instruction encompasses a wide array of topics, each critical in the field of computer science:

- Efficient and Clean Coding in C++: I emphasize the importance of writing code that is not only effective but also maintainable and clear, fostering best practices in programming.
- Advanced Tree Algorithms: My curriculum includes sophisticated concepts like Centroid Decomposition and Binary Lifting on Trees, equipping students with the tools to solve complex computational problems.
- Data Structures: I cover essential data structures such as Segment Trees and Sparse Tables, foundational for understanding advanced computer science concepts.
- String Algorithms.
- Graph Algorithms.
My role goes beyond teaching; it involves inspiring and challenging students to reach new heights in their intellectual journey, preparing them for future academic pursuits and careers in technology.

In my role as an educator at this esteemed institution, I have had the honor of teaching and mentoring a remarkable cohort of students, including prodigious talents like Mahdi Hajibeigi, Pedram Sadeghian,

and Aryan Alavi. Each of these students achieved the prestigious honor of winning gold medals in the Iran National Olympiad of Informatics.

Algorithm and Data Structures Teacher
Young Scholars Club

Nov 2019 - Present (4 years 1 month)

Teaching and preparing gold medalists for the International Olympiad of Informatics 2020, 2022, 2023. Our team won 6 golds and 6 silvers in these years, out of the 12 students we sent to IOI.
The Young Scholars Club is the Iranian government organization that holds the national Olympiads, selects the best performers, and, sends them to the International Olympiads.

Programming Class Director at Summer Camp
Young Scholars Club

Jul 2023 - Aug 2023 (2 months)

The Programming class focuses on enhancing students' coding and implementation skills. Within the course, students tackle various programming challenges. Teaching Assistants are on hand to guide and assist students as they work through these problems.
While the emphasis of this class is on implementation, students explore algorithms and data structures in a separate course.
Conducted on-site, this class accommodates 55 students and consists of 14 sessions, each spanning 4 hours. Over the course duration, students are presented with over 50 problems to solve.

Scrum Master
Mahsan

Mar 2022 - Jun 2023 (1 year 4 months)

Software Engineer
Mahsan

Oct 2020 - Jun 2023 (2 years 9 months)

Improving performance and adding features. Scrum master of Sarand team, Zojaj group, Shetab department.

Contest Coordinator
CodeForces

Mar 2022 - Feb 2023 (1 year)

Coordinating the Codeforces rounds. Reviewing contest proposals, and coordinating setters and testers in the preparation of the rounds.

Scientific Committee Member at European Girls Olympiad of Informatics 2022
TÜBİTAK

May 2022 - Oct 2022 (6 months)

As part of SC, I ensured that the contest goes smoothly. I was involved in problem selection, preparation of statements, preparation of test cases, validating test cases, writing solutions, etc.

Algorithm, Data Structures, and, Programming Teacher

Farzanegan 1 Tehran

Jul 2021 - Jul 2022 (1 year 1 month)

Head of Olympiad of Informatics Department

Irysc

Mar 2018 - Jun 2022 (4 years 4 months)

Contest Coordinator

HackerEarth

Jan 2019 - Mar 2022 (3 years 3 months)

Judge

Africa And Arab Collegiate Programming Championship

May 2021 - Dec 2021 (8 months)

Preparing the Arab And Africa Collegiate Programming Championship which is one of the eight super-regionals in ICPC. The contest host in Luxor.

Editorialist

Topcoder

Feb 2020 - Oct 2021 (1 year 9 months)

Writing editorials for TopCoder Single Round Matches.

Tester

CodeForces

Jul 2017 - Jul 2021 (4 years 1 month)

Testing programming contests.

Head Teaching Assistant

Amirkabir University of Technology - Tehran Polytechnic

Sep 2019 - Jan 2020 (5 months)

Course: Basics of Programming with C.

Instructor: Prof. Fatemeh Zare, Farzaneh Salari.

Algorithm and Data Structure Teacher

Young Scholars Club

Jul 2019 - Jul 2019 (1 month)

Teaching algorithms and data structures to Iran National Olympiad of Informatics (INOI) students in the INOI summer camp.

Combinatorics Teacher Assistant

Amirkabir University of Technology - Tehran Polytechnic

Jan 2019 - Apr 2019 (4 months)
Instructor: Prof. Seyed Naser Hashemi.

Contest Coordinator
Quera
Aug 2017 - Mar 2019 (1 year 8 months)

Programming Teacher Assistant
Young Scholars Club
Aug 2017 - Sep 2017 (2 months)
Iran National Olympiad of Informatics Summer Camp

Education

Sharif University of Technology
Master of Science - MS, Algorithms and Computations
Oct 2021 - Oct 2023

Amirkabir University of Technology - Tehran Polytechnic
Bachelor of Science - BS, Computer Science
2017 - 2021
Finished the bachelor's degree taking second place among CS students.

AE High School
High School, Mathematics
2015 - 2016

Shahid Sadoughi High school
High School, Mathematics
2013 - 2015

Licenses & Certifications

ICPC Asia Region, Tehran Site Ninth Place - ICPC - International Collegiate
Programming Contest

ICPC Asia Region, Tehran Site Second Place - ICPC - International Collegiate
Programming Contest

Sixty-second place in ICPC World Finals 2019 (Porto) - ICPC - International
Collegiate Programming Contest

ICPCID - ICPC - International Collegiate Programming Contest
https://icpc.global/ICPCID/EK5807EGYX7M

ICPC Asia, Tehran Site, Gold medal - ICPC - International Collegiate Programming Contest

116th place in Facebook HackerCup 2021 - Meta

Twenty-fourth place in ICPC World Finals 2020 (Moscow) - ICPC - International Collegiate Programming Contest

Presenter at Competitive Learning Institute Symposium at ICPC World Finals 2019 (Porto) - ICPC - International Collegiate Programming Contest

Presenter at Competitive Learning Institute Symposium at ICPC World Finals 2020 (Day-Zero) - ICPC - International Collegiate Programming Contest

Presenter at Competitive Learning Institute Symposium at ICPC World Finals 2020 (Moscow) - ICPC - International Collegiate Programming Contest

Presenter at Competitive Learning Institute Symposium at ICPC World Finals 2020 (Moscow) - ICPC - International Collegiate Programming Contest

Skills

Performance Improvement • Team Management • Problem Setting • Contest Preparation • Problem Solving • Competitive Programming • C++ • Algorithms • Data Structures
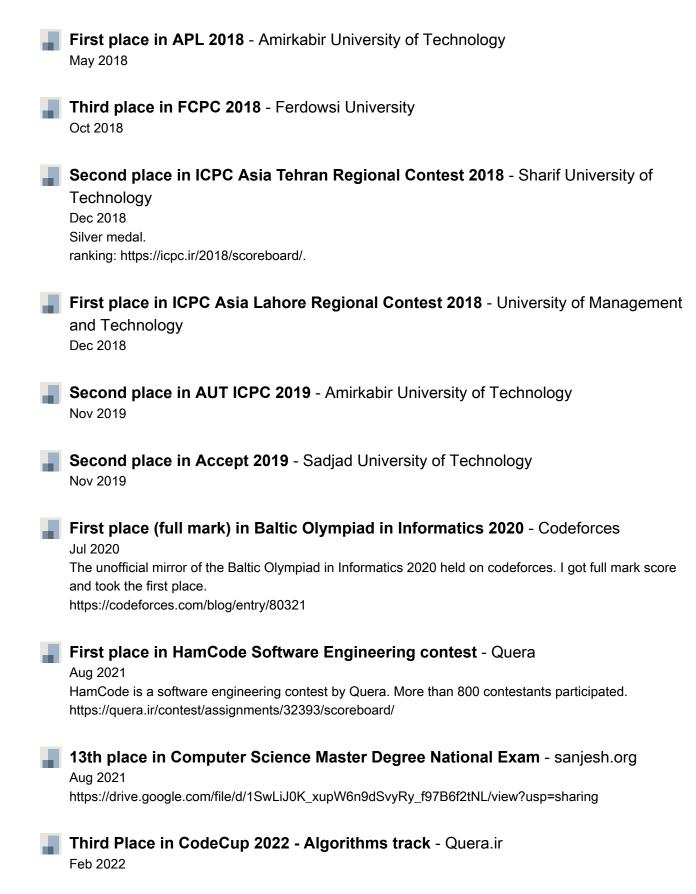
Honors & Awards

39th place in Codeforces LATOKEN Round 1 - CodeForces
Jun 2021

68th place in Codeforces Global Round #3 - CodeForces
Jun 2019

Third place in CodeCup 2018 - Quera.ir
Nov 2018
https://quera.ir/course/assignments/6692/scoreboard/

First place in ACCEPT 2018 - Sadjad University of Technology
Nov 2018

https://acm.sadjad.ac.ir:2018/scoreboard

First place in APL 2018 - Amirkabir University of Technology
May 2018

Third place in FCPC 2018 - Ferdowsi University
Oct 2018

Second place in ICPC Asia Tehran Regional Contest 2018 - Sharif University of Technology
Dec 2018
Silver medal.
ranking: https://icpc.ir/2018/scoreboard/.

First place in ICPC Asia Lahore Regional Contest 2018 - University of Management and Technology
Dec 2018

Second place in AUT ICPC 2019 - Amirkabir University of Technology
Nov 2019

Second place in Accept 2019 - Sadjad University of Technology
Nov 2019

First place (full mark) in Baltic Olympiad in Informatics 2020 - Codeforces
Jul 2020
The unofficial mirror of the Baltic Olympiad in Informatics 2020 held on codeforces. I got full mark score and took the first place.
https://codeforces.com/blog/entry/80321

First place in HamCode Software Engineering contest - Quera
Aug 2021
HamCode is a software engineering contest by Quera. More than 800 contestants participated.
https://quera.ir/contest/assignments/32393/scoreboard/

13th place in Computer Science Master Degree National Exam - sanjesh.org
Aug 2021
https://drive.google.com/file/d/1SwLiJ0K_xupW6n9dSvyRy_f97B6f2tNL/view?usp=sharing

Third Place in CodeCup 2022 - Algorithms track - Quera.ir
Feb 2022

CodeCup is the biggest programming competition in Iran. This year 2417 programmers participated in the Algorithm track. The competition included two contests, a Software Engineering contest and an Algorithms and Problem Solving contest.

Third Place in Digikala SuperCup 2022 - Digikala.com
Mar 2022

Over 5000 participants participated in Digikala SuperCup preliminary round. Everyone selected one of the Software Engineer, Front-end Developer, DevOps Engineer, or, Data Scientist role and participated in the particular contest for his role. Then the first five participants in each role teamed up and competed together in a long contest trying their best to build a simple web application.

Third Place in Iran ICT Challenge - SharifICT
Jun 2022

ICT Challenge #7 had 270 participants from software engineers in Iran. To solve the challenges, we (me and Javad Karimi) used Python, JS, Graph Algorithms, Task Scheduling, ...