






Reza Bigdeli

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EDUCATION

University of Waterloo MMATH in Computer Science, Algorithm and Complexity Group	2020 - 2022 GPA: 3.73/4.0
Sharif University of Technology, Tehran, Iran Bachelors of Science in Computer Engineering, Software Engineering Group	2015 - 2020 GPA: 16.20/20.0

EXPERIENCE

Tavana System - Front-End Team Front-End Developer, Internship <ul style="list-style-type: none">• Learning Angular framework.• Developing an Angular library for Authentication and Dashboard modules to reduce duplication	Summer 2020 Zanjan, Iran
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RESEARCH

Connectivity Properties of the Flip Graph After Forbidding Triangulation Edges Prof. Anna Lubiw, Master's Thesis	2022
Forbidding Edges Between Points in the Plane to Disconnect the Triangulation Flip Graph Reza Bigdeli, Anna Lubiw - YRF of SoCG 2022 and arXiv	2022 arXiv:2206.02700
Metric Graph Bipartitioning Prof. Hamid Zarrabi-Zadeh, Bachelor's Thesis	2019

PROJECTS

Developing an online shopping system (like Amazon) using Scrum methodology (agile practices) Product planning, sprint planning, project management (Taiga), implementation (Django Rest - Redux - React)	Fall 2019 GitHub link
Developing a web application for advising high-school students during their academic and professional pathway Defining, describing user stories, prototyping, back-end implementation (Django Rest)	Fall 2019
Implementing an Information Retrieval (IR) System Indexing and searching tokens among given documents, document classifications and clustering	Fall 2018
Design, development, and deployment of an online currency payment system - Back-End, Django Producing the proposal, Work Breakdown Structure (WBS), User Case Diagram, and developing the web application	Spring 2018 GitHub link
Implementing a music streaming app - PostgreSQL, Django, HTML, CSS Designing and developing the database and integrating it with a web application	Fall 2017
Extending an operating system (Pintos) - C Modifications to the OS in 4 phases: Threads, User Programs, Virtual Memory, File Systems	Fall 2017
Implementing an RPG - Java Developing game mechanics with Object Oriented Programming (OOP), implementing game graphics in swing	Spring 2016 GitHub link
Implementing a basic search engine - C++ Normalizing documents text, creating a dictionary, query handling	Fall 2015

TECHNICAL SKILLS

Programming languages: C, C++, Python, Java	Web Technologies: Django, Django Rest, HTML, CSS, JavaScript, Angular, React and Redux
ML/AI: Pytorch, Numpy, Tensorflow	Miscellaneous: PostgreSQL, Git, Latex

RELEVANT COURSEWORK

Computer Science: Data Structures and Algorithms, Design of Algorithms, Database Design, Operating Systems, Algorithmic Game Theory, Artificial Intelligence, Modern Information Retrieval, Computational Geometry, Sublinear-time Algorithms, Machine Learning, Reinforcement Learning, System Analysis and Design, Software Engineering, Agile Software Development
Mathematics: Discrete Maths, Probability and Statistics, Linear Algebra, Combinatorial Optimization

POSITIONS OF RESPONSIBILITY

Instructional Apprentice, Algorithms, University of Waterloo	Winter 2022 - Spring 2022
Teaching Assistant, Algorithms, University of Waterloo	Fall 2021
Teaching Assistant, Data Structures and Algorithms, Sharif University of Technology	Fall 2019
Teaching Assistant, Algorithmic Game Theory, Sharif University of Technology	Spring 2019
Teaching Assistant, Artificial Intelligence, Sharif University of Technology	Fall 2018 - Spring 2019
Teaching Assistant, Advance Programming in Java, Sharif University of Technology	Spring 2017

ACHIEVEMENTS

Nation Wide University Entrance Exam	Ranked 37th between 167,868 students	2015
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