Tal Berdichevsky

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Availability: June-December 2023

EDUCATION

Northeastern University, Khoury College of Computer Sciences, *GPA: 3.84/4.0, Dean's List*   **Boston, MA**
Bachelor of Science in Computer Science, AI Concentration, Minor in Mathematics   *Expected Completion: May 2025*
<u>Relevant Coursework:</u> Graduate Level Software Engineering, Computer Systems | Algorithms and Data | Object-Oriented Design |
Linear Algebra | Database Design | Digital Design | Cybersecurity | Math. of Data Models | Discrete Structures

Newton South High School (NSHS), *GPA: 3.91/4.0*   **Newton, MA**
<u>Relevant awards:</u> MA State Seal of Biliteracy with Distinction in Hebrew and English   *September 2019-June 2021*
High Honor Roll(all quarters), Warren B. Manhard Mathematics Award (honorable mention*)*, AP Scholar with Honors
<u>Relevant experience during this time:</u> NSHS Math. TA (Algebra I-BC Calc), Personal Math. tutor (elementary-middle school levels)
External Coursework: Multivariable Calculus (**Harvard Extension School**), Sin x factorization (**MIT** High School Studies Program)

SKILLS

Programming Languages/Fields: Java | Swift | HTML | JavaScript | CSS | Python | System Verilog | RISC-V Assembly | DLang | C
Applications: Figma | IntelliJ | XCode | Swift Playgrounds (app dev.) | Eclipse | Microsoft Office Suite | DataGrip | PhpStorm | PyCharm | AWS
Languages: English (native) | Russian (native) | Hebrew (native) | Spanish (classroom level)

EXPERIENCE

Database Design Teaching Assistant (Northeastern)   **Boston, MA**
- Foster a collaborative learning environment by encouraging collective thinking when attending to students.   *January 2023-Present*
- Support students' grasp on material and enhance their knowledge beyond base content through office hours.
- Grade assignments and exams, providing feedback to best aid students' understanding.

Civic AI Lab Research Team Member (Northeastern)   **Boston, MA**
- Conduct research on text summarization/NLP&modeling; help gig workers understand issues in info. ecosystem.   *September 2022-Present*
- Reduce public uncertainty regarding disinformation by developing a website highlighting research findings (code&prototypes).
- Spread awareness on disinformation in gig workforce: presented achievements at **NATO Human-Centered AI seminar** (*November 2022*).
- Improve website design to match gig workers' interests by conducting qualitative analysis on prototype interviews.

MIT PRIMES Circle (Program for Research In Mathematics, Engineering, and Science)   **Cambridge, MA**
- Explored Graph Theory under the mentorship of an MIT undergrad in a selective program.   *January 2019-May 2019*
- Offered students a unique student view on Graph Theory and map coloring by authoring expository paper on Graph Theory&map coloring.
- Presented at ninth annual MIT PRIMES conference to spread knowledge regarding project highlights.

PROJECTS

ApartmentsNEU   *November 2022-December 2022*
- A web application offering a solution to housing/realty difficulties by connecting students, advertisers, and realtors in the Boston area.
- Utilizes MySQL, HTML/Bootstrap, Flask, and Python.

HowBusyIsMarino   *September 2022-November 2022*
- A website presenting heat maps to track capacity trends at various NU gyms across campus, helping students determine workout plans.
- Utilizes HTML/Bootstrap and Flask, as well as AWS for web scraping and as a previous hosting solution.

Maze Simulator and Solver   *May 2022*
- An interactive game in Java producing a randomized maze of a chosen size using Kruskal's algorithm.
- Allows a user to attempt to solve maze or calculates an optimized solution using breadth-first or depth-first searches.

Game of Life App   *April 2020*
- SwiftUI app simulating the famous Game of Life game, allowing a remote IOS user to conveniently draw cells by hand.
- App algorithmically evolves generations, including premade evolve templates (e.g. bullet pattern), improving users' grasp on its algorithm.
- Capable of speeding up/slowing down evolve process and saves games in separate tabs for an ultimate user experience.

ACTIVITIES & LEADERSHIP

AerospaceNU (Northeastern) Prototype simulations developer   *September 2022-Present*
- Simulated conditions for satellite launch to ensure the safety and feasibility of the mission.
- Collaboratively evaluated and selected craft components for the upcoming undertaking.

Oasis(Northeastern) Web Developer   *September 2022 -December 2022*
- Collaborated on the front&back end design of HowBusyIsMarino.
- Resolved common workout scheduling difficulties on campus by providing students with a clear overview of recent gym capacity trends.
- Exploring different graphical analyses of web-scraped data to optimize user interaction.

KIND Club (Kids-In-Need Drive, NSHS) Co-founder, co-president, fundraiser organizer   *2019-2021*
- Led and organized meetings and fundraising events to support children and families in need in the greater Boston area and beyond.
- Donated to Black Lives Matter, Boston Children's Hospital, The Greater Boston Food Bank.