# Tal Berdichevsky

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#### **EDUCATION**

### Northeastern University, Khoury College of Computer Sciences, GPA: 3.857/4.0, Dean's List

Boston, MA

Bachelor of Science in Computer Science, AI Concentration, Minor in Mathematics

Expected Completion: August 2024

Relevant Coursework: Software Engineering(Graduate Level) | Computer Systems | Algorithms and Data Structures | Object-Oriented Design | Linear Algebra | Database Design | Cybersecurity | Mathematics of Data Models | Discrete Structures

#### Newton South High School, GPA: 3.91/4.0

Newton, MA

September 2019-June 2021 Awards: MA State Seal of Biliteracy(Hebrew & English) with Distinction, High Honor Roll (All Quarters), Warren B. Manhard Mathematics Award (Honorable Mention), AP Scholar with Honors

Experience: Math Teaching Assistant (Algebra I through 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 | System Verilog | RISC-V Assembly | DLang | C Software Tools: Jira | Figma | IntelliJ | XCode | Swift Playgrounds | Eclipse | Microsoft Office Suite | DataGrip | PhpStorm | PyCharm Languages: English (Native) | Russian (Native) | Hebrew(Native) | Spanish (Conversational)

#### **EXPERIENCE**

#### **Software Engineer Co-op- Content Recommendations (Wayfair)**

Boston, MA

- o Developed new production recommendation strategies, optimized existing ones, established alerting for July 2023-December 2023 jobs/Airflow DAGs, and enhanced test coverage.
- o Gathered input from various teams and worked on a validation endpoint for the content database used by marketing teams.
- o Directly produced 11.5% GRS/User Lift in Wayfair's biggest promo period by assisting in the dev. of a "Quarter Takeover" promo event.
- o Designed and implemented an organization-wide support request form, automating ticket creation and team notifications. The form streamlined the team's support process, significantly improving efficiency and receiving high praise for its impact.
- o Fostered a culture of teamwork through event organization.

### **Database Design Teaching Assistant** (Northeastern)

Boston, MA

- Advanced student learning by promoting collaborative thinking and extending knowledge beyond coursework. January 2023-May 2023
- o Graded assignments/exams and hosted office hours, providing feedback to best aid students' understanding.

## Civic AI Lab Research Team Member (Northeastern)

Boston, MA

- Conducted research on text summarization/NLP and modeling to support gig workers against disinformation.

  September 2022-April 2023
- o Reduced gig workers' uncertainty about disinformation in their information ecosystem by developing a website highlighting research findings. Improved website design to match gig workers' interests using qualitative analysis on prototype interviews.
- Spread awareness on the issue: presented achievements at NATO Human-Centered AI Seminar (November 2022).

## MIT PRIMES Circle (Program for Research In Mathematics, Engineering, and Science)

Cambridge, MA

o Explored Graph Theory under the mentorship of an MIT undergrad in a selective program.

- January 2019-May 2019
- o Offered students a unique view on Graph Theory by authoring an expository paper on Graph Theory and map coloring.
- o Spoke at the Ninth Annual MIT PRIMES Conference, sharing insights on project highlights.

### **PROJECTS**

ApartmentsNEU (MySOL, HTML/Bootstrap, Flask, Python)

November 2022-December 2022

o A web application offering a solution to housing/realty difficulties by connecting students, advertisers, and realtors in the Boston area.

#### HowBusyIsMarino (HTML/Bootstrap, Flask, AWS)

September 2022-November 2022

o A website presenting heat maps to track capacity trends at various NU gyms across campus, helping students determine workout plans.

## Maze Simulator and Solver (Java)

May 2022

o An interactive maze game using Kruskal's algorithm with user-driven and automated solutions via breadth-first and depth-first searches. April 2020

Game of Life App (Swift)

o An iOS app simulating the famous Game of Life, featuring user-drawn cells, variable evolution speeds, and save functionality.

o Incorporated pre-made evolve templates (e.g. bullet pattern) to enhance engagement, improving users' grasp on the game's algorithm.

# ACTIVITIES & LEADERSHIP\_

### AerospaceNU (Northeastern) Prototype Simulations Developer

September 2022-May 2023

o Simulated satellite launches, ensuring mission safety and feasibility with appropriate component selection for the craft.

## Oasis (Northeastern) Web Developer

September 2022-December 2022

- Collaborated on the front and back end design of HowBusyIsMarino.
- o Resolved common workout scheduling difficulties on campus by providing students with a clear overview of recent gym capacity trends.
- o Explored different graphical analyses of web-scraped data to optimize user interaction.

## KIND Club (Kids-In-Need Drive, NSHS) Co-Founder, Co-President

September 2019-May 2021

- Led and organized meetings and fundraising events to support children and families in need in the greater Boston area and beyond.
- o Donated to Black Lives Matter, Boston Children's Hospital, The Greater Boston Food Bank.