

# Khalil Haji

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github.com/khalilhaji | Available: July – December 2020

## EDUCATION

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**Northeastern University**, Boston, MA September 2017 – Present  
Khoury College of Computer Sciences, *University Honors Program*  
*Candidate for Bachelor of Science in Computer Science* Expected May 2022

**Honors:** GPA: **3.78/4.00**, Dean's List

**Relevant Courses:** Object-Oriented Design, Algorithms and Data Structures, Computer Systems, Networks, Discrete Structures, Fundamentals of Computer Science, Foundations of Cybersecurity

**Leadership:** Vice President of Progressive Student Alliance, Council Member for Explore Boston Living Learning Community

## COMPUTER KNOWLEDGE

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**Languages:** *Proficient:* Java, JavaScript, Node.js/Express, Racket *Familiar with:* Python, C, R

**Operating Systems:** Linux (Arch, Debian/Ubuntu), macOS, Windows

**Software:** Git, IntelliJ IDEA, Emacs, Sublime Text

## EXPERIENCE

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*Teaching Assistant*, **Khoury College of Computer Sciences**, London, UK July – December 2019

- Drafted homework and lab assignments, held weekly office hours, and ran labs to help students understand the course concepts and complete weekly assignments.
- Graded student homework submissions and provided them with feedback.

*Software Development Intern*, **PranaGEO**, Bodrum, Turkey October 2016 – August 2017

- Co-developed a dashboard for farmers to predict frost events for better crop management using Shiny.
- Implemented unit tests for the open source R package geoSpectRal, using the *testthat* unit testing library.
- Developed a search engine for package documentation from The Comprehensive R Archive Network (CRAN) using node.js and the Neo4j graph database including the Cypher Graph Language.
- Designed and implemented the sign-up process to create a PranaGEO account used for all PranaGEO services.
- Improved knowledge of HTML, CSS, Markdown, and RMarkdown and used these to develop documentation.

*Emergency Response Coordinator*, **Bodrum Humanity**, Bodrum, Turkey October 2016 – June 2017

- Managed the organization's emergency hotline and triaged calls.
- Coordinated donation deliveries and volunteered at fundraising events.

## PROJECTS

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**EZAnimator** (*Java*)

- Designed an animation player and editor using object-oriented principles.
- Implemented multiple front-ends, including Java Swing, SVG output, and a textual description of the animation.

**Seam Carving** (*Java*)

- Implemented the seam carving algorithm for content-aware image resizing.
- Utilized a dynamic programming approach to implement the algorithm.

**Nokta** (*Shell*)

- Created a set of configuration files for Arch Linux and organized them using GNU Stow.
- Developed a script to install all desired packages and set up the system with the configuration files.
- Designed a GTK theme based on the gruvbox color scheme.

## INTERESTS

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Biking, Travel, Public Transportation, Piano, Social Justice