

## Nicolas S. Montanaro

25 Weatherbell Drive  
Norwalk, CT 06851

203 505 0205  
mail@nicolasmontanaro.com

## Experience

### Foyer, Inc.

*Information & Technology Director*

Trumbull, CT

*May 2017 - Present*

- Responsible for overall direction and technical decisions regarding the development of the Foyer: Home Discovery mobile application.
- Created datasource agnostic backend APIs using Node which allowed for a single point of ingestion for nationwide home information. This makes it simple for any maintainer with knowledge of JavaScript to seamlessly add new data to the existing pipeline.
- Researched, implemented and maintained a collaborative filtering recommender system with Hadoop and Spark. Aggregate information about user preferences is used to provide suggestions for homes with qualities a user is likely to be interested in.

### Recurse Center

*Participant*

New York, NY

*February 2018 - May 2018*

- The Recurse Center runs free, self-directed, project based programming retreats for anyone who wants to get dramatically better at programming.
- Created a Game Boy emulator in Go and gave a presentation on the implementation details.

### mySpiderweb

*Full Stack Developer*

Rochester, NY (remote)

*May 2016 - September 2016*

- mySpiderweb is a social media publishing tool that streamlines a multi-network presence for small businesses.
- Was a member of a small team developing the application for use with Facebook, LinkedIn, and Twitter integration. The stack included Meteor, HTML, CSS3, JavaScript, and MongoDB.

### Intel

*Software Application Engineer*

Santa Clara, CA

*January 2015 - December 2015*

- Analyzed the performance of 3D camera hardware & software on Intel architecture prior to release.
- Developed and tested mobile performance analysis tools for Android, iOS, and Windows-based tablets for Intel lab personnel.
- Identified and resolved proprietary software issues which resulted in the on-time delivery of a performance monitoring tool to Intel labs.

## Open Source Projects

### Halken

*Go*

[github.com/99z/halken](https://github.com/99z/halken)

- Halken is a Game Boy emulator written in Go.
- Created as an exercise in low-level programming and to gain a better understanding of computer architecture while at the Recurse Center.

### Independent study in code clone detection techniques

*Java*

[nicolasmontanaro.com/indstudy.pdf](https://nicolasmontanaro.com/indstudy.pdf)

- Implemented a naive version of GPLAG.
- Compared GPLAG against widely-used tools for plagiarism detection in student code submissions.
- Benchmarked and analyzed tokenization vs. subgraph isomorphism detection techniques for code clone detection.

### Alice & August: A Love Story

*Lua*

[github.com/99z/ludum-dare-33](https://github.com/99z/ludum-dare-33)

- A game created entirely from scratch in under 48 hours for the Ludum Dare 33 game jam.
- Made with no prior knowledge of Lua or the LÖVE framework.

## Education

### • Rochester Institute of Technology

Rochester, NY

*Bachelor of Science in Computer Science*

*August 2012 - May 2017*

- Computer Science Student Lab Instructor and Ambassador.
- Member and former Vice President of the Phi Kappa Psi fraternity, New York Theta chapter.