# Nabil Hassein

### **EXPERIENCE**

Khan Academy — Software Engineer

Remote — October 2016 - present

- Extensive work on infrastructure and backend code including an overhaul of the permissions grant system, creation of an internal dashboard for all alerts, performance reporting, and a major overhaul of logging and analytics
- Created a predictive model of Google hosting costs accurate within 3% every month, versus a target of accuracy within 15%
- Mentored a fellow (KA position similar to an intern, but for career switchers rather than college students) who received a full-time offer only two months into a four-month stint

## Betterpath, New York, NY — Software Engineer

New York, NY — October 2013 - February 2016

- Backend development in Scala: wrote RESTful APIs, Datalog (Datomic) queries, internal data transformations, and much more for a now-defunct medical startup
- Devops and system administration: wrote and maintained config files and Ansible/shell scripts to automate all cloud infrastructure related tasks

# **School for Poetic Computation** — *Participant*

New York NY — July 2017

- Accepted into <u>Code Narratives</u> two-week session
- Created generative-DOOM, a rhyme generator based on the lyrics of MF DOOM: https://nabilhassein.github.io/generative-DOOM/

## **Recurse Center** — *Participant*

New York, NY — March 2016 - August 2016; June 2013 - August 2013

- Visualizing NYC criminal court summonses by precinct: <a href="https://nabilhassein.github.io/nyc-summons-precinct-visualization/">https://nabilhassein.github.io/nyc-summons-precinct-visualization/</a>
  - An interactive map using NYC open data, built with React, Redux and d3 after preliminary data analysis and transformation using python's pandas library
- Exercises in Idris, a dependently typed programming language: <a href="https://github.com/nabilhassein/idris-meap">https://github.com/nabilhassein/idris-meap</a>

- o <a href="https://nabilhassein.github.io/blog/notes-on-idris/">https://nabilhassein.github.io/blog/notes-on-idris/</a>
- yahbfs, yet another haskell brainfuck system: https://github.com/nabilhassein/yahbf
  - An interpreter and toy compiler for a simple Turing-machine like esoteric programming language
- bitcurry, an unfinished bittorrent client: https://github.com/nabilhassein/bitcurry
- Algorithmic art, Matrix-style green rain: <a href="https://nabilhassein.github.io/p5-sketches">https://nabilhassein.github.io/p5-sketches</a>

# Lakeside High School, Lake Village, Arkansas — Math Teacher

Lake Village, Arkansas — July 2012 - June 2013

- Taught Geometry and Algebra II
- Ran an introduction to computer programming club

# **EDUCATION**

New York University — Joint B.A. in Mathematics and Computer Science New York, NY — September 2008 - May 2012

### WRITING

- Against Black Inclusion in Facial Recognition:
  <a href="https://decolonizedtech.com/2017/08/15/against-black-inclusion-in-facial-recognition/">https://decolonizedtech.com/2017/08/15/against-black-inclusion-in-facial-recognition/</a>
- Informal writing on my blog: https://nabilhassein.github.io

# SELECTED ACTIVITIES, SKILLS AND INTERESTS

- Volunteer teacher of an introductory web development class at the Brooklyn Institute for Liberal Arts, a public high school, via ScriptEd
- Moderate proficiency in Spanish and Arabic
- Jazz pianist, chess player, amateur boxer

## REFERENCES

Available on request