

Jonathan Mares

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languages

English | Russian (fluent)
Hebrew (fluent)

computing

Python* | JavaScript* | C
PHP | OCaml | Java

backend

Meteor* | Flask | Django
Jekyll* | MongoDB | SQL

frontend

Blaze* | Angular 1 | React
Backbone | Mustache
jQuery | Less | D3.js
Bootstrap* | Materialize*

dev ops

Git* | Galaxy* | Heroku
Passenger | Docker

tools

Chrome Dev Tools | LaTeX
Mathematica

current courses

Databases

completed courses

Computer Science

Computational Genomics
Operating Systems
Artificial Intelligence
Numerical Analysis
Analysis of Algorithms
Systems Programming
Functional Programming
Java & Data Structures
Chemical Engineering
Unit Operations Lab.
Fluid Mechanics
Heat & Mass Transfer
Kinetics & Reactor Design
Separation Processes
Process Dynamics

organizations

Kappa Sigma Fraternity

activities

Motorcycles | Bicycles
Jazz | Classical | Piano
Civilization 5 | Watersports

* = proficient

education

May 2017

Cornell University, Bachelor of Science; GPA: 3.02
Double Major in Chemical Engineering & Computer Science

Ithaca, NY

industry experience

Summer '16

Wayfair – *Software Engineering Intern*

Boston, MA

- Rebuilt customer facing Address Book feature
 - Enabled client side add/remove/edit features with *Backbone* & *Tungsten.js*
 - Redesigned page architecture: Wrote *PHP* & frontend *Tungsten.js* MVC components & implemented *Mustache* templating
- Overhauled internal order search page used by thousands of employees

Spring 2016

Pfizer – *Software Engineering Associate*

New York, NY

- Designed and implemented an internal full stack *JavaScript* web app in *MeteorJS*
 - Converted customer business requirements such as drag-and-drop and mobile compatibility into technical specifications
 - Designed UI with *Materialize* & built frontend with the *Blaze* *JavaScript* library
 - Utilized Meteor & npm packages such *Autoform*, *iron-router*, & *dragula.js*
 - Stored data with *MongoDB* & enforced schemas with *simple-schema* package
 - Configured custom deployment on Red Hat Linux with *Passenger*
- Upgraded internal site to implement *Angular 1* & conform to mobile first standards
- Acted as Business Analyst on an internal platform. Focused on improving front end & implementing *Material Design* standards.

Summer '14

Novartis Vaccines – *Process Engineering Intern*

Research Triangle Park, NC

Summer '13

IPS- Integrated Project Services – *Project Engineering Intern*

Somerset, NJ

Summer '12

Hi-Tech Pharmacal – *Validation and Technical Services Intern*

Amityville, NY

freelance

2015 - Now

MaggioMares Software – *Full Stack Developer*

maggiomares.com

Co-started shop specializing in fast, responsive, & lightweight websites for small businesses (Clients include restaurants, real estate agents, & other professionals).

2015 - Now

Mares Tutoring – *Private Tutor*

High School & AP level Math, Chemistry, Physics, & Computer Science subjects.

computing projects

July 2016

dineR – *Team Lead & App Architect*

dinerapp.tk

Tinder for meals near you. Built a *Meteor Ionic* app with *React* at Wayfair's company wide hackathon. Presented to the CEO & CTO. Only intern team to win as finalists.

October '15

LiveGroceryList

livegrocerylist.tk

A *Flask* app to share grocery lists with family members. Heroku & *PostgreSQL*.

January '15

ReadMe-dot-Text

HackCooper @ Cooper Union, NY

Hackathon app that converts images into speech for the visually impaired. Built on IBM *Bluemix* with *Watson* text-to-speech API, *Leap Motion* for gesture recognition, and *ABBYY FineReader* for optical character recognition. IBM API prize winners.

research & chemical engineering

2013–2016

Putnam Lab Group – *Drug Delivery Researcher*

Cornell University, Ithaca, NY

- Designed and ran experiments to define a new hydrogel material
- Conducted spectroscopy, protein release, and hydrogel degradation
- Publication: Ricapito, N., **Mares, J.**, ... (2016), Insight into the Unexpected Degradation of Dihydroxyacetone-Based Hydrogels. *Macromolecular Chemistry & Physics*.

Spring 2015

Capstone Chemical Process Design

Ithaca, NY

Prepared a full scale feasibility study of a Penicillin production process. Technical work included reactor and distillation column design, *Aspen Plus* simulations, a robust process flow diagram, and economic analysis (capital and operating cost estimation).