Jonathan Mares

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languages
English: native
Russian: fluent
Hebrew: fluent

computing
Python | JavaScript | Java
PHP | OCaml | C | Matlab

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
Grunt | Mathematica

current courses
Computational Genomics
Operating Systems
Machine Learning
Artificial Intelligence

completed courses
Computer Science
Analysis of Algorithms
Systems Programming
Functional Programming
Java & Data Structures
Discrete 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

education

May 2017 **Cornell University,** Bachelor of Science; GPA: 3.01 — Ithaca, NY
Double Major in Chemical Engineering & Computer Science

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, built, & launched 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
- Upgraded internal site to implement *Angular 1* & conform to mobile first standards
- Acted as Business Analyst on an internal platform, focusing 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

O '15 - 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).

A '15 - Now **Mares Tutoring** – *Private Tutor*
High School & AP level Math, Chemistry, Physics, & Computer Science subjects.

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.

Spring 2015 **Capstone Chemical Process Design** — Ithaca, NY
Prepared a full scale feasibility study of a Penicillin production process.

research

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

selected publications

- Ricapito, N., **Mares, J.**, Petralia, D., & Putnam, D. (2016), Insight into the Unexpected Degradation of Dihydroxyacetone-Based Hydrogels. Macromolecular Chemistry & Physics.