Nicholas Pun

Fullstack Developer, Math Enthusiast

Phone: (226) 792-3449
Email: npun@edu.uwaterloo.ca
LinkedIn: /in/nicholaspun
Github: nicholaspun

Skills

Languages: Javascript, Python, Ruby, MATLAB, Rust, Racket, Scala, Haskell, C/C++

Frameworks, Databases & Tools: Angular, React, Vue, Backbone, Meteor, Rails, PostgreSQL, NodeJS

Experience

Software Developer   Kitchener, ON

Vidyard | Analytics Team   Sept. 2018 – Current

- Rewriting Youtube analytics layer to provide more accurate data for over 8000 organizations, and prevent from constantly exceeding YouTube Data API quota
- Ensuring GDPR compliance throughout services: preprocessing and filtering loggers in the Ruby on Rails backend and moving tokens to authorization headers in the JS frontend

Software Developer   San Francisco, CA

Freckle Education (formerly Front Row Education)   Jan. 2018 – Apr. 2018

- Created a new summary page for over 9000 school administrators and a more streamlined interface for our early learners (a significant portion of our 1 million+ learners) to read stories using React and Backbone
- Improved the frontend test suite coverage by adding Jest logic and snapshot tests, and maintaining QA testing suite
- Learned the basics of Haskell by making small backend bug fixes and adding Hspec unit tests

Frontend Developer   Mississauga, ON

Finastra (formerly D+H)   Jan. 2017 – Apr. 2017

- Reduced client-side load time by 20% through frontend optimization: implemented pagination over several components and worked with the backend team to reduce payload size and make smaller, faster API calls
- Improved regression test coverage by over 50% by writing automated test suites using Protractor.
- Took part in designing a companion web app from scratch using Angular 2.0 and ngRx

Undergraduate Researcher   Waterloo, ON

Physics of Information Lab – University of Waterloo   May 2016 – Aug. 2016

- Researched new techniques in processing audio data signals to further optimize current methods and improve on bit-rate reduction
- Implemented an algorithm based on these techniques using Matlab, and applied techniques towards a project in number theory and primes
- Wrote paper summarizing findings: https://arxiv.org/abs/1808.00572, currently in the process of submission

Projects

Beer Necessities   In-Progress

- I was having trouble keeping track of all the beer I drink, so I built a full-stack project with a React frontend and Rust backend (using Rocket) to do so. I can filter my beers by ratings, breweries, etc. and will soon implement a search feature

Education

University of Waterloo   2015-2020

Bachelor of Computer Science (Expected Graduation: April 2020)

- Relevant Coursework: Algorithm Design and Analysis, Introduction to Optimization, Scheduling Theory, Graph Theory, Combinatorics, Real and Complex Analysis, Data Structures and Data Management