

## Noam Gagliardi-Rabinovich

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### PROFILE SUMMARY

Full stack developer based in Toronto.

Professional experience with: Elixir / Phoenix, Ruby / Rails, Javascript, Node, UNIX / Linux environment.

Worked on APIs, web applications, design of algorithms (content recommendation, data analysis and prediction, etc.), concurrent systems, real-time notification services, mobile sites, and various scripts and libraries (data importers and converters, backup scripts, content sorting, shell scripts).

Open source contributions (Rails (fixed ActiveRecord bug), some documentation (Rust, Julia, Rake), odk aggregate gem, and many personal and internal libraries). More examples in private repos upon request.

### EXPERIENCE

#### **Lead Software Developer at UDIO AgTech (Startup failed) June 2016 - Nov. 2016**

Joined as sole developer a year into the company's founding, after it pivoted into software. The existing software had been outsourced and was not production quality, so I worked on maintaining old version while designing and implementing new version.

- Helped simplify and improve a set of algorithms used to predict optimal timing and duration of irrigation of crops based on data (weather, soil type, etc.).
- Heavily involved in the hiring process. Conducted interviews and helped define team of 3 developers (one junior, one senior). Subsequently led the team and performed management role as well as technical.
- Implemented algorithms and various services (for fetching and transforming weather and field data) as a set of concurrent services running on the Erlang VM / OTP (written in the Elixir programming language).
- Wrote a number of libraries and internal tools (Elixir library for performing atomic before/after hooks during DB transactions, library for throttling use of external APIs to avoid passing quotas, library for ensuring units types (cm, inch, etc.) are compatible in calculations, etc.).

- Wrote administration panel and RESTful API that is consumed by web and mobile front-ed.
- Application and algorithms were fully tested using real-world data to verify results of algorithm service outputs.

### **Software Developer at theScore Inc., Toronto    Oct 2014 - June 2016**

Was part of the “my score”, “shared services”, and “chatbot” teams, which build and maintain multiple services used by the client applications, the API, and other in-house apps (analytics, CMS). During my first few months, I focused on working in a different codebase on every assignment. This allowed me to gain a bird’s-eye view of the overall architecture and take on more complex projects that span services. Among them:

- Designed and implemented (in a team of three) theScore’s “chatbot” backend, which serves multiple chat platform users (e.g Kik, Facebook, Slack) with real-time sports-related answers (latest scores, team news, etc.).
- Refactored the internal service that is used for dispatching real-time notifications (rewrote the highly-coupled queue system, an abstraction over beanstalk, as a separate library with a consistent API and features that made it easy to test and fake messages).
- Designed and implemented player-recommendation algorithm that is used during the mobile app’s signup process.
- Worked with analytics department on a team recommendation algorithm based on user location and implemented the backend.
- Helped the maintainer of the search application (based on elasticsearch) refactor the codebase in a modular way that allows it to dual-boot so the code can be shared across different apps.
- Wrote many internal scripts (in ruby, bash, and SQL): background jobs (such as detecting and expiring inactive subscriptions), test helpers, data importers.
- Added documentation and automation scripts to word-of-mouth processes that were undocumented. Contributed to company blog.
- Built backend and API for internal app used by analytics team.
- Also fixed lots of bugs and wrote smaller features on different apps: the main API, the user-management service, the user notifications service, the internal admin service, the search service (improved relevance of search results), and the personalized news feed service.

**Software Developer at Functional Imperative, Toronto    Aug 2013 - Aug 2014**

Worked on numerous projects, ranging from large enterprise applications, to small interactive web apps. Was involved throughout the complete development cycle: from ideation to deployment and maintenance.

- Designed large data converter/importer used to amalgamate two complex data sources. Helped write Angular GUI for user to easily map data source to target.
- Helped refactor and rewrite backend for large RoR application at UHN (Toronto General Hospital), working within a large team and integrating legacy technology.
- Developed an interactive iPad application (guided tour of a building and its surrounding areas) using web technologies and Phonegap.
- Developed node.js api and web frame with features including passwordless login, user tracking across domains, and payment integration with Stripe.
- Server-side maintenance (setting up cron jobs for database dumps, queueing background jobs for processing data using Redis, resolving time-critical server-side problems).
- Helped sort user generated content on large legal database (CanLii Connects) by designing and implementing a custom sorting algorithm for Elasticsearch.

**EDUCATION**

Brock University — Mathematics Integrated with Computers and Applications (MICA), 2010 - 2011 (no degree)

University of Windsor — English Literature and Creative Writing, 2008 - 2010 (no degree)