

Values Clean code, Clean data, Clear team communication.

Work History

Member of API Services team

Development/bug fixes in Go and Node.js services for content recommendation application. Interfaced with recommendation engine, and coordinated with Recommendation Service team on architecture decisions. Encouraged code organization and leveraging type system where possible.

New version of recommended content categorization

Coordinated with Recommendation Service team to roll out new version of topic categorization system for recommended content. Included establishing initial set of topics and creating a plan to roll out future topics.

Feedback sent to Recommendation Service

Added hooks to user events on recommended content which sent feedback with context back to the Recommendation Service.

Basis (an Intel company)

Backend Engineer

Apr 2015-Nov 2016, San Francisco, CA

Development/maintenance for API service

On API team for fitness tracking watch. Features, bug fixes, deployment, and configuration changes. Developed in Python, deployed using SaltStack.

Transitioning between two sleep data streams

Transitioning between two versions of the user's sleep data streams, while avoiding interruptions in both individual sleep events and daily aggregates.

APNS (Apple push notifications) Configuration

Debugging problems with APNS service and Python library. Configuration changes to APNS deployment on cluster, including installing new certs.

Brilliant (formerly Alltuition)

Senior Engineer

Jul 2011-Nov 2014, Chicago, IL / San Francisco, CA

Ajax View framework (brilliant.org)

Implemented a view framework on top of Django. Facilitated reuse of code between partial and full page loads. Transparent fallback to non-javascript (targeted users with potentially old browsers).

Practice Section (brilliant.org)

Implemented the backend of the initial version of the Practice Section on brilliant.org.

FeeFighters Samurai Python API library (alltuition.com)

Implemented initial Python client library for the FeeFighters Samurai API. My contributions are best seen here: https://git.io/vgH2u

Analytics Integration (brilliant.org)

Initial analytics data schema. Added ability to trigger analytics events from Python, which ran as a background task, or rendered in the browser as JavaScript calls to various 3rd party services.

Improvements to loan consolidation rate prediction system (alltuition.com)

Conducted Mechanical Turk based research project (alltuition.com)

Oracle (formerly Stellent)

Software Engineer

Feb 2006-Sep 2010, Chicago IL

Spreadsheet file parsers for Outside In

Bug fixes, optimization, general maintenance, and feature implementation, in C. Responded to customer support requests, worked with display engine team, focused on maintaining legacy functionality.

Web Development Contracting

ElectionBettingOdds.com - October 2020-current

Add features to static site generator, Aggregating data from from multiple prediction markets

Etherpad-lite (open source project) - April 2020-July 2020

Various bug fixes and features developed for Etherpad, a self-hosted collaborative word processor

Datamaglia - Dec 2014-Feb 2015

Bare-bones user dashboard in Django for datamaglia.com

Voyager Tech - May 2011-Jul 2011

Django admin customization for memprotein.org

Shelfworthy - Apr 2015-Oct 2010

Django development for shelfworthy.com

Reuseit - Nov 2009-Dec 2009 / Feb 2011-Jul 2011

PHP/SQL development, feature/bug fixes for site, store and shipping systems

Other Contracting

Brilliant - October 2020-current

Planning and writing interactive online computer science course material

Projects

Feed Getter:

github.com/orblivion/feedGetter

An RSS aggregator in Haskell.

Haskell Synth:

github.com/orblivion/Haskell-Synth

A sound and music synthesizer in Haskell.

Argument Clinic

An experimental debate site (now defunct). Created with Django. Attempted to structure debates with subdebate and definition constructs. Had few, but enthusiastic users.

Skills

| Go | JavaScript |
|------------------------|-----------------------------------|
| Scala | C/C++ |
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| Flask | Apache/Nginx |
| PostgreSQL | Heroku |
| Cassandra | SaltStack |
| Docker | |
| | |
| OSX | Gentoo |
| _ | |
| | |
| Functional Programming | WebRTC |
| | Flask PostgreSQL Cassandra Docker |

Education

Illinois Institute Of Technology

B.S., Computer Engineering

2001-2005, Chicago, IL

Miscellaneous Courses

Coursera: Functional Programming Principles in Scala

Course Record: www.coursera.org/records/yjD8PGuY9cGQpE5g

Erlang Camp 2014

A weekend-long crash course in Erlang and OTP, which took place in Austin Texas

Dec 10 2020 -- Daniel Krol -- dan@danielkrol.com