ELI THORKELSON

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TI:DR

I'm a full-stack web software engineer with a doctorate in cultural anthropology. I'm currently doing back-end development for the Nebo Agency in Atlanta, where I've had a special focus on improving testing and web stack performance in our client projects. I previously designed and built more than a dozen Ruby on Rails applications for the University of Chicago's Humanities Division. I've maintained Linux servers, web software stacks, and relational and NoSQL databases; I'm especially interested in software design patterns and user interfaces. I recently returned to software after a few years in academic teaching and research.

TECHNICAL SKILLS

Languages: Ruby, PHP, Python, SQL; HTML, CSS, Javascript; college coursework in Java and C++.

Web development frameworks: Ruby on Rails (~7 years), Drupal 6/7/8, Node.js, WordPress.

Databases: PostgreSQL, MySQL, SQLite, Mongo, Redis.

Web front end: Ember.js, jQuery, d3.js, Freeboard, Mobiledoc, jPlayer, PanoJS, Bootstrap; SASS, CoffeeScript/ES6.

Web server software: Apache, Nginx, Phusion Passenger, Apache Solr, Nagios, Ansible, Shibboleth SP.

Development software: Cucumber, RSpec, qUnit; Git (GitHub/GitLab/BitBucket); Asana.

Web services: AWS, DigitalOcean, EngineYard, Algolia, New Relic, Mailchimp, Mailgun.

EMPLOYMENT

Feb 2020–	Back End Web and Applications Engineer, Nebo Agency, Atlanta
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Built websites and web applications (mainly Ruby and PHP), maintained web servers and database systems.

Interfaced with clients and internal project teams, provided estimates for engineering tasks.

Improved server response times by 10x on a high-profile client project (down to <200ms from over 2000ms).

Built an OSX native application for internal task management (in Swift). Introduced unit testing for client projects for the first time at the company. Improved performance in our internal URL routing library by a factor of two.

Aug 2018- Research Fellow/Web Developer, Dept. of Sociology and Social Anthropology, Stellenbosch University

Jan 2020 Published research papers on the politics of higher education.

Led web projects for a new scholarly society (gathered requirements, managed scope and timelines, surveyed end users).

Developed web projects in PHP (Drupal 8 and WordPress, CSS theming, custom module development).

Sep 2017- Lecturer, Dept. of Sociology and Social Anthropology, Stellenbosch University

Jul 2018 Taught undergraduate and graduate classes.

Published research papers on the politics of higher education.

Jan 2016- Postdoctoral Fellow/Applications Developer, Digital Liberal Arts Center, Whittier College

Jul 2017

Designed and implemented web applications to support student learning.

Developed Javascript-based front end interfaces in Ember.js.

Implemented custom text editing interface using Mobiledoc, with Bootstrap for user interface elements.

Designed and built Ruby on Rails applications with JSON API interfaces, backed by Mongo and MySQL.

Managed web projects for internal clients; managed requirements and IT resources; researched technical options.

Taught undergraduate classes, such as Anthropology of Digital Cultures.

Jan 2012- **Web Applications Programmer**, Humanities Computing, University of Chicago Dec 2015

Lead developer for a suite of 16 in-house administrative applications built in Ruby on Rails.

Introduced Ember.js for user interfaces and PostgreSQL (replacing MySQL).

 $Designed\ and\ built\ real time\ monitoring\ system\ with\ app\ performance\ metrics\ (stored\ in\ Redis,\ displayed\ with\ displayed\ with\$

Freeboard, and powered by Ruby on Rails and Node.js).

Maintained web stack on application servers using Apache, Phusion Passenger, Solr (search), and Shibboleth SP (authn).

Introduced Cucumber for full-stack integration testing and qUnit for front-end testing.

Implemented configuration management with Ansible for application servers.

Coordinated with internal clients, held testing and training sessions.

Introduced issue tracking with GitLab, used Asana for team-based task management.

 $Built\ and\ maintained\ interfaces\ with\ external\ systems\ (LDAP,\ Workday,\ XLS/CSV\ feeds,\ legacy\ campus\ systems).$

Built public web projects (primarily Drupal-based), such as <u>dma.uchicago.edu</u> (a rare languages media archive).

Supervised and mentored web development assistants.

July 2011- Web Development Assistant, Humanities Computing, University of Chicago

May 2012

Built and maintained Drupal 7-based websites.

Standardized Drupal themes and modules across a range of sites.

Primary developer for public sites such as scrolls.uchicago.edu or humanitiesday2011.uchicago.edu.

Assisted in maintaining Rails applications, WordPress and static HTML sites.

Jan 2001- Web Programmer, Language Resource Center, Cornell University

May 2005

Built and maintained custom web software for classroom learning and digital media distribution.

Integrated MySQL relational data storage into an object-oriented software environment (Python/Zope 2.x).

Assisted with systems administration for Red Hat web servers.

EDUCATION

2014	Ph.D. Anthropology, University of Chicago
2007	M.A. Anthropology, University of Chicago
2004	B.A. Anthropology, Cornell University