

JAKE KENNEALLY

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EXPERIENCE

Commonwealth Computer Research, Inc. (CCRI) | Charlottesville, VA and remote

UI/UX Software Engineer | July 2014 to present

Stealth | A global geospatial data visualization toolset in the browser made with AngularJS, Scala, and GeoServer, and GeoMesa

- Enhanced maritime and airspace data analysis by adding 2D Histogram, data grid, and customizable map popup plugins
- Improved performance of large queries by investigating and utilizing Apache Arrow
- Built Docker containers for efficient, repeatable deployments of Stealth, GeoServer, and GeoMesa plugins
- Created an AngularJS plugin to query and display GDELT event data leveraging GeoMesa on Google Cloud Bigtable

Arpeggio | A data-driven marketing analytics webapp made with Angular, Scala, and Postgres

- Served as Tech Lead to guide the development team, handle weekly data ingest, and ensure client needs were met
- Upgraded frontend from outdated AngularJS built with Grunt to use Angular 7 built with Webpack
- Moved expensive frontend data processing to backend to deliver 10-20x speed improvements
- Implemented automated PDF, PPT, CSV, XLS, and email report generation to reduce months of client work to minutes

Sanitracker | A webapp to track bacteria levels by room in the UVA Medical Center made with Angular, Scala, and Postgres

- Led a team of four in successful deployment and delivery of the product on an aggressive 3-month deadline
- Built D3-based bar, line, and pie charts, and floor plan visualization with cross-filter support in an accompanying data grid

GeoMesa | An open-source suite of tools that adds geospatial querying and analytics to distributed databases made with Scala

- Developed support for ingesting, storing, and querying raster images
- Created CLI tools to more simply ingest, query, and delete data
- Developed ingest pipeline with Apache Storm and Kafka to store multiple types of geospatial data in GeoMesa

Intern | May 2012 to March 2013

SWIFT/SPINOZA | Early-warning threat prediction and analysis webapps made with ExtJS and Java

- Resolved 40+ UI bugs and upgraded SWIFT's frontend to use the new version of CCRI's common UI framework
- Improved search using Compass and Lucene to allow searching event metadata
- Created a punchcard time-series visualization using D3 to show the frequency of weekly events by hours of the day

Genworth | Richmond, VA

IT Intern in DevOps | May 2013 to August 2013

Puppet Manager | An internal webapp to manage Puppet made with CodeIgniter

- Automated provisioning and orchestration of Puppet nodes through a simple UI

PROJECTS

Advent of Code 2018 (adventofcode.com)

- Participated in an Advent calendar and competition of small programming puzzles using TypeScript

Did UVA Win? (diduvawin.com)

- Maintained a website from March 2014 to now that simply answers "Did UVA win in Men's Basketball?"
- Upgraded in 2019 from manually-updated GitHub pages to use TypeScript, Node Express, the ESPN API, and Heroku

VOCAL Admin

- Provided free software development and support for VOCAL Virginia in the 2013-2014 CS Service Learning Practicum
- Gained year-long experience in Ruby on Rails, Agile development principles, and client interaction
- Saved 10 hours per week for VOCAL employees and automated many administrative tasks of the non-profit

Before You Graduate

- Built a CodeIgniter webapp for the UVA 2014 Trustees to manage completing the "114 Things to do Before You Graduate"

Rush Theta Chi UVA

- Built a CodeIgniter webapp to automate administrative tasks of fraternity recruitment for the Theta Chi Xi Chapter
- Saved 20+ hours of manual Excel and PowerPoint work for the fraternity Rush Chairs

EDUCATION

B.A. Computer Science, with Distinction | University of Virginia

August 2010 to May 2014

- GPA: 3.651
- Awards and Honors: Dean's List, Theta Chi National Chapter Foundation Sherwood Blue Memorial Scholarship; Xi Chapter Presidential Scholarship, Third Year Council Ring Scholarship Recipient

PERSONAL

- Co-organizer of the Angular Ann Arbor Meetup group
- Member of the University of Virginia Young Alumni Council
- Plays guitar, violin, mandolin, and ukulele
- Starred in a dramatic reenactment true-crime TV show on Discovery Channel