# Kimberly Coy

Software Engineer
Indianapolis, IN

## Objective

Write cool code. Solve interesting problems. Pursue my passion for technology.

## Contact

* 317-752-6206
* kimberlycoy@mybluetub.com
* [linkedin.com/in/kimberlycoy](https://linkedin.com/in/kimberlycoy)
* [github.com/kimberlycoy](https://github.com/kimberlycoy)

## Top Skills

* Web Development: React, Angular, Node
* Serverless Computing: Amazon Web Services, Google Firestore and Cloud Functions
* Agile Methodologies: Scrum, Kanban, Extreme Programing

## Experience

### mybluetub

#### Software Engineer

##### April 2010 - Present (9 years 11 months)

###### Indianapolis, Indiana Area

Designed and developed web and mobile apps using React for the front end and Firebase to store and sync data. Employed 100% serverless architecture to reduce costs and start-up barriers. Utilized Google Services to automated business workflow such as automating email responses and tracking business metrics.

Technologies:

* React: Designed and developed web and mobile apps
* AWS S3/CloudFront: Used to deploy and distribute apps
* Cloud Firestore: Integrated into apps to store and sync data
* Google Cloud Functions: Created event triggered functions to maintain and organize Firestore data
* AWS Cloud9: Create environment to write, run, and debug code
* AWS CodePipeline, CodeBuild: Implemented continuous build, testing, and delivery
* Google Services, Apps Script, Forms, Sheets, Docs: Automated business workflow

### Medical Mutts

#### Volunteer / Board Member

##### June 2018 - Present (1 year 9 months)

###### Indianapolis, Indiana Area

Trained service dogs using 100% force-free training techniques. Fostered dogs. Assisted with fundraising and the search for a new facility.

### Praxis Life Sciences @ Eli Lilly and Company

#### Software Engineer

##### July 2012 - December 2017 (5 years 6 months)

###### Indianapolis, IN

Created apps, APIs, and IoT devices to discover, design, and demonstrate innovations in clinical research. Leveraged cloud services, agile development, and design thinking to rapidly prototype hardware and software solutions.

Technologies:

* Angular: Developed web and mobile apps.
* iOS: Created iPhone and iPad apps in Swift.
* Firebase: Integrated realtime databases into web and iOS apps.
* Jenkins: Configured for testing, continuous integration and delivery.
* AWS EC2: Hosted app servers, Nginx, and Jenkins.
* AWS S3/CloudFront: Deployed Single Page Apps.
* AWS IoT: Prototyped with AWS IoT buttons. Created IoT shadows for prototyped and third-party devices to integrate them into apps.
* AWS Cognito: Integrated with Lilly’s Ping Identity to provided federated sign- in for web and iOS apps.
* AWS API Gateway: Configured to front Lambda functions and other app services.
* AWS Lambda: Untilized node functions to support web and iOS apps, APIs, and IoT devices.

### Chemonics International @ Kenya Pharma

#### Software Engineer

##### October 2010 - April 2013 (2 years 7 months)

###### Nairobi, Kenya

Redesigned and overhauled the kenyapharma.org website, a supply chain management tool and information portal, improving performance, usability, and security. Moved the code from a custom PHP/MySQL application to the Yii Framework to speed up and reduce the complexity of development. Introduced best practices such as source code management, issue tracking, and unit testing. (LAMP, Yii Framework, Java: Apache POI) Advised on technical issues such as web hosting, data backup/recovery, and mobile applications.

Migrated the production server to an Amazon EC2 server. Set up monitoring and automated database and file backups.

### ChaCha

#### Senior Software Engineer

##### February 2010 - April 2010 (3 months)

###### Carmel, IN

Implemented and validated a direct connection to AT&T’s SMS using the SMPP protocol, allowing ChaCha to bypass SMS aggregators for AT&T users. (Java, SMPPAPI) Developed a RESTful web service using Grails to publish Scribe log files, allowing developers to view and search production logs.

Created a web application to display SMS traffic data from the production environment, allowing staff to analyze data and developers to troubleshoot production issues. This service accessed data across multiple MySQL databases and took into account production performance concerns.

### Indigo BioSystems

#### Senior Software Engineer

##### February 2006 - December 2009 (3 years 11 months)

###### Indianapolis, IN

Initiated and advocated the use of cloud computing for production and ad hoc needs, such as testing and demos. Used Amazons Web Services EC2 instances (Linux and Windows images) with Elastic Block Storage for data persistence beyond the instance, removing the need for many in- house servers and allowing the organization to take advantage of the high performance, pay-as- you-go pricing model.

Designed and implemented a custom RDF triplestore using a relation database and vertical partitioning, abstracting the SQL statements so that different databases could be used, e.g. MySQL, Oracle, HSQLDB, PostgreSQL. This triplestore served as the foundation for data persistence of Indigo products, freeing developers from the traditional object-relational mapping concerns. (Java, Spring, RDF)

Created a RESTful web service API for Indigo’s custom triplestore, translating SPARQL queries into SQL statements which facilitated the publication of linked data. Designed Indigo’s lab automation framework, a modularized web-based platform that automates the collection and analysis of lab data. (Java, Spring, JSP)

Developed ontologies to describe lab data collection and analysis. Translated these ontologies into RDF schema. (RDF, RDFS, N-Triple, OWL)

Conducted interviews using Joel on Software’s Smart and Gets Things Done, making hiring decisions for new developers and interns.

Refactored a legacy web-app to use the Spring Framework and hibernate, freeing it from technology lock-in and simplifying the development environment, speeding up development and allowing for more diverse deployment environments. (Java, Spring, Hibernate, Tomcat, Glassfish, Sun AppServer 7, SOAP, Lucene, Centera)

### Consultant @ Eli Lilly and Company

#### Software Engineer

##### February 2005 - February 2006 (1 year 1 month)

###### Indianapolis, IN

Monitored, maintained, continued development of online application from Quovix. (Java, Linux, MySQL, Bash) Created and documented business processes such as disaster recovery, business continuity, and standard operating procedures to support an on-line application, enhancing the business’ ability to maintain normal operations and consistency of work despite transitioning team members.

Assessed software vendors, making recommendations concerning each vender’s technical and project management skills for an organization seeking to replace a former service provider, allowing management to select a new development partner with confidence and implement a smooth transition to the new vendor.

### Quovix

#### Software Engineer

##### February 2000 - February 2005 (5 years)

###### Indianapolis, IN

Developed the Quovix platform, an on-line collaboration application for managing and developing software using remote development teams. Functionality included: issue and milestone tracking, file sharing, discussion forums, and bidding. The platform allowed Quovix to utilize experts from across the world to deliver software products. (Java, Enhydra, MySQL)

Internationalized a large web-application into 7 languages (English, Chinese, Russian, German, Spanish, Japanese, and Korean). Coordinated technical and language requirements between management and translation teams. Configured production servers to handle the new languages and successfully deployed the new localized application, allowing international users to view the site in their local language.

Monitored and maintained an on-line application consisting of load balanced web servers and two hot backup databases servers. Installed and configured Apache web server, Enhydra Application Server, MySQL database server, and other applications. Wrote monitor scripts and troubleshot issues, maintaining a 99.9% uptime for the production environment.

### Peace Corps

###### 3 years 4 months

#### Volunteer Leader

##### December 1998 - December 1999 (1 year 1 month)

###### Dar es Salaam, Tanzania

Represented Peace Corps volunteers as an integral part of a multi-cultural education team. Facilitated in-service and pre-service training programs for Peace Corps volunteers and their Tanzanian counterparts.

Led a team of volunteers in the facilitation of in-service and pre-service training programs for Peace Corps Volunteers and their Tanzanian counterparts, increasing the facilitators’ presentation skills and strengthening participants’ teaching skills.

#### Volunteer

##### September 1996 - December 1998 (2 years 4 months)

###### Iringa, Tanzania

Taught advanced mathematics program for 217 Tanzanian high school students for a two-year period, improving self-esteem, study skills, and cross- cultural understanding.

## Education

Peace Corps
B.S. Equivalent Education/Training · (1996 - 1996)
Arusha, Tanzania

Peace Corps
B.S. Equivalent Swahili Language/Culture · (1996 - 1996)
Arusha, Tanzania

Purdue University
B.S. Electrical Engineering, Software · (1993 - 1996)
West Lafayette, IN

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