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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| EMAIL: | [jkotheimer9@gmail.com](mailto:jkotheimer9@gmail.com) | | | PORTFOLIO: | [https://jackkotheimer.com](https://jackkotheimer.com/) | | | | GITHUB: https://github.com/jkotheimer | | | | | |
| I am a firm believer in result-oriented work - It only took me three years to complete my undergraduate degree. That is not only because I set a goal to do so, but because I dug in and worked hard, all while remaining on the dean’s list and creating projects with other developers as much as possible. | | | | | | | | | | | | |
| Languages | | | Frameworks | | Databases | | | Tools | | | | |
| * Java * C * C++ * Python * Bash | | * PHP * SQL * JavaScript * HTML5/CSS3 | * Apache CFX * Node.js * Flask * Django * Hibernate | | * MySQL * Amazon RDS * MongoDB/Atlas * Firebase | | | * Git * Linux * AWS * SSH * Docker | | | | * Nginx + Apache * ElasticBeanstalk * Celery/RabbitMQ * OpenAPI Specification |
| Education | | | | | | | | | | | | |
| Loyola University Chicago | | | B.S. Software Engineering (Deans List) | | | May 2020 | | | | | | |
| Work Experience | | | | | | | | | | | | |
| Back-end Developer Intern | | | EzClinic | | Chicago, IL | | | September 2020 – Current | | | | |
| * Reorganized source code repository and filtered out unnecessary and unsafe files and wrote bash scripts to automate the 3 main deployment mechanisms:   + Local development & debugging server deployment   + Remote staging server deployment using ElasticBeanstalk & test result fetching   + Production server deployment using ElasticBeanstalk & CNAME swap * The script builds a Docker image for each of the above servers from a templated Dockerfile, which is pushed to Dockerhub for ease of use and version control   + Built a celery notification system running on a RabbitMQ server into each Docker image   + Configured MySQL, RabbitMQ, and Nginx servers and on each Docker image   + Wrote several deployment hooks to run the Django wsgi on Nginx, connect it to the MySQL server, & connect a Celery notifier to the RabbitMQ server * Executed the migration from a local database to a remote database with a secure transfer of credentials upon deployment * Completely decoupled server logic from client applications by refactoring to a REST api written in python, using the Django framework   + Wrote documentation outlining the I/O and application flow of a REST api that would serve the same functionality as before   + Implemented the decoupling of each HTTP request one REST function at a time   + Utilized the previously written staging script to test each update before being pushed to production | | | | | | | | | | | | |
| Computer Science Tutor | | | Loyola University Chicago | | Chicago, IL | | | November 2019 – May 2020 | | | | |
| * Tutored Loyola Computer Science students on an appointment basis * Ensured high quality aid to all students both during and outside work hours | | | | | | | | | | | | |
| Research Assistant | | | Loyola University Chicago | | Chicago, IL | | | July 2019 – December 2019 | | | | |
| * Analyzed videos of CPS courses, ensuring curriculum and research standards were upheld * Participated in a series of seminars determining the most effective educational techniques for computer science | | | | | | | | | | | | |
| Java Programming Instructor | | | Digital Media Academy | | Chicago, IL | | | June 2019 – August 2019 | | | | |
| * Taught fundamentals of the Java programming language to high school students * Structured a curriculum with hands-on project based learning | | | | | | | | | | | | |
| Android Research Developer | | | Loyola University Chicago | | Chicago, IL | | | May 2019 – June 2019 | | | | |
| * Collaborated with three other software engineers in person, full-time for a month * Created customizable sign-language-based app for physically and vocally disabled people (see ‘TalkMotion’ under Project Experience tab) | | | | | | | | | | | | |
| Project Experience | | | | | | | | | | | | |
| Pianoboard | | | [https://jackkotheimer.com/projects/#pianoboard](https://jackkotheimer.com/projects/" \l "pianoboard) | | | | | | | | 2018 - Current | |
| * Created a RESTful web service to create music projects which store and process client-made MIDI recordings * All CRUD operations occur in an isolated Node.js API, completely uncoupled from the webpage server * **Utilized**: PHP, Node.js, Apache HTTPD, HTML/CSS/JavaScript, MySQL, Bash, Git | | | | | | | | | | | | |
| ChatApp | | | [https://jackkotheimer.com/projects/#chatapp](https://jackkotheimer.com/projects/" \l "chatapp) | | | | | | February 2020 – May 2020 | | | |
| * Developed a customer service based chatting application focused on programmatic database manipulation * **Utilized**: Python, Flask, Jinja2, HTML/CSS/JavaScript, MySQL, Bash, Git | | | | | | | | | | | | |
| E-Commerce API | | | [https://jackkotheimer.com/projects/#ecommerce](https://jackkotheimer.com/projects/" \l "ecommerce) | | | | | | | August 2019 – December 2019 | | |
| * Built a RESTful API for a barebones e-commerce website using Java, Apache Server w/ CXF, Apache Maven, Junit, MySQL, Hibernate, AWS, and Git | | | | | | | | | | | | |
| TalkMotion | | | [https://jackkotheimer.com/projects/#talkmotion](https://jackkotheimer.com/projects/" \l "talkmotion) | | | | | | May 2019 – June 2019 | | | |
| * Collaborated on an Android app to translate sensor readings from hand gestures to text-to-speech commands * **Utilized:** Java, SQLite, Android Studio, object state machines, machine learning, Git | | | | | | | | | | | | |