

Dylan Bakr

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Education

Butler University, Indianapolis, IN
Degree: Bachelor of Science
Major: Computer Science
Graduation: 2022

IUPUI, Indianapolis, IN
Degree: Bachelor of Engineering
Major: Computer Hardware Engineering
Graduation: 2022

Objective: Obtain a position as a junior software engineer that will:
-allow me to utilize my full technical/programming knowledge and expertise
-to make contributions to projects that have the potential to impact lives globally
-learn common trade practices and etiquette, and to better understand what the field has to offer; to develop myself not only as a programming professional but also as a person.

Skills:

OOP:

- Java
- C
- C++
- Python
 - Serving/Routing
 - Web/Data Scraping
 - Visualization
 - Speech Recognition
- Swift

Web Development:

- Full Stack Developer
- HTML/CSS/JS
- Node.js
- React
- AngularJs
- Vue

Data Management:

- MySQL/SQLite
- Databases
 - Relational Modeling
- Algorithms
- Stack/Queue/Heap

Mobile Application Development:

- iOS Development
 - Xcode
 - Swift
- Android Development
 - Android Studio
 - Java
 - Kotlin

Experience

Milliman, Indianapolis, IN, USA:

Position: *Junior Software Engineer Intern* (June 2021-August 2021)

Utilizing modern frameworks, in conjunction with the big three web languages, another intern and I developed a pre-call planning tool for pharmaceutical representatives. The objective of the application was to gain insights about a healthcare practice or professional prior to a marketing call. This app development project was a new endeavor taken on by Milliman, a historical actuary, per client request. The requirements for this project were that we would create a data pipeline to ingest a CSV file's information to then migrate into objects in our Salesforce cloud environment, which we relied on as our database, by means of their API. Then develop an application in which the information from our database was visualized in a relevant manner that was easily understood by the end user. Using Veeva CRM, we were able to access the Salesforce data by using their Insights.js library-- a partnership with Salesforce makes this SaaS invaluable for medical data. A browser embedded within the Veeva CRM iPad application hosted our web application, which was built on AngularJS and utilized Chart.js libraries for visualizations. The database architecture was relational and the application architecture followed the Model-View-Controller (MVC) approach suited for AngularJs.

TechPoint S.O.S. Summer Challenge, Indianapolis, IN, USA:

Position: *Lead Developer* (June 2020-July2020)

Due to the impact of COVID-19, many services and facilities in our city (Indianapolis) were forced to change the way they operate. For many, this was a struggle-- so they enlisted the help of students from across the country to design and deliver solutions. My team was tasked with developing a solution that would streamline the airport process in order to make people not only eager to fly again, but to feel safe doing so. My team and I decided to develop an application that would create an itinerary for the user. It would do so by using a combination of the information from the ticket that we could obtain through the user and the airport/entity holding that data (flight time, gate, boarding, etc) as well as global information like

popular routes and peak security times. We planned to monitor security lines through the application as well, either allowing the user to timestamp, or by having TSA update a database; Our app then builds an itinerary that would optimize the client's wait at the airport-- what time they should plan to arrive, through which door, where they were to head, and ultimately when to get in line for TSA. Given more time, we had planned to add turn-by-turn airport navigation, and commercial information such as available locations, menus, wait times, and navigation to these places. We were able to deliver a skeleton in the 5-week deadline but unfortunately did not win the competition. We lost to an application that allowed users to directly schedule a time to go through security.

WFYI, Indianapolis, IN, USA:

Position: *Full Stack Developer* (August 2019-December 2019)

Created a virtual memorial garden to commemorate Auschwitz survivor and activist Eva Kor who recently passed away. This was part of a service course that I was enrolled in at Butler last Fall -- Engineering Projects In Community Service (E.P.I.C.S) that fulfills our university community graduation requirement of 20 hours of community service. Through this program, WFYI (PBS) enlisted the help of a small group of students to create a web garden that lives on their website and allows users to explore the garden, plant a flower, and leave a kind message attached to that flower. I was lead developer and began by storing user demographic information using a stylized HTML form (on their site) that connected to a SQL database (on their server) through Python's Flask framework. After this I had to work with my teammates in charge of the front end stuff using JavaScript and Node.js to obtain and manifest the data from the form into flowers in the garden. WFYI had a beta-release event early in January on the anniversary of the freeing of Auschwitz where they demonstrated the application, but have yet to open it publicly on their website.

Lilly Boys' and Girls' Club, Indianapolis, IN, USA

Position: *Computer Lab Coordinator* (January 2018-May 2018)

I was responsible for introducing youth (13-16) to basic android programming. We had decided to try designing an app to connect various Boys' and Girls' Clubs throughout the Indianapolis area; Unfortunately, due to lack of time and resources (their budget didn't allow us to obtain machines that we needed to properly develop the application; I was also

given this objective in April when I was near ending school and returning home in May), we were unable to complete the app. However, from that experience, I learned what it took to really be a team leader and to work as a group to accomplish something.

Butler IT Tech Team, Indianapolis, IN, USA

Position: *IT Student Lead Technician* (August 2019-current)

Currently working to maintain and enhance Butler's campus and network. I use Salesforce to process issues within the Butler network as well as to communicate with clients. I am also responsible for network imaging and deploying new hardware/software. Along the way I have been developing necessary professional communication skills while obtaining technical knowledge and troubleshooting methods during classroom emergency calls.