Home Page:

Title text - Hey y’all!! My name is Adam Domka and I’m an eager entry-level Software Developer looking to join your team!

Body text – I am a recent graduate from Northcentral Technical College in Wausau. I graduated after the Fall semester of 2022 with my second associate degree, this time in the IT - Software Developer program.

About page:

Title – How did I get here?

Body title 1 – How did I start my professional career?

Body text 1 – My first round of school led me into the manufacturing world with a degree in Prototype & Design from Northcentral Technical College in Green Bay, WI. I learned a lot about the life cycle of products and how the development of a product can change between iterations. I can still remember the first prototype I made as a Cast Urethane Technician, and how three years later it won an award for “Best New Tech Product” upon its release.

Body title 2 – What happened next?

Body text 2 – After 5 years or so in the manufacturing industry, I left to pursue a career in Multi-Media Production. I spent about another 5 years pursuing that field and learning almost all my skills via a network of friends I had built during that time. I also signed up for a couple bootcamps with School of Motion as my real passion in that field was animation. I learned a good chunk of the Adobe Suite and went on to produce a short film, a sketch comedy series with some local comedians, a cartoon series, and quite a few music videos and show/tour promo videos for local bands in the Madison area.

Body title 3 – Why am I trying to work for YOU?

Once Covid started, I lost the ability to meet and film with people, and I started to contemplate how I could continue to use my skills. The process of animating in After Effects is painfully time consuming when done by keyframe animations, and I knew that a background in JavaScript could speed up that process greatly with the use of AE Scripting and Expressions. That’s when I decided to focus on becoming a software developer so that I could keep my passions separate from my work, while simultaneously being able to use passion to improve my professional capabilities. (Can’t decide if this next part will be included…) Now that I’ve graduated and spent some time exploring what a career in software development can offer, I’m extremely interested in the idea of working towards becoming a Software Architect as I believe I could also use many of the “soft skills” I’ve learned in the past and currently use in the management position I have at my current job.

Skills page:

PROFESSIONAL:

OOP card – Object-Oriented Programming was the subject we spent the most time learning in school. Starting with a Zoo application and progressing on to more advanced group projects like my Capstone project.

Read more – Through out my entire time in school, we spent a great deal of time learning Object-Oriented Programming and its four pillars – abstraction, encapsulation, inheritance, and polymorphism. In order to learn how to apply these principles in a project, we created an application that replicates a zoo using C# and Visual Studio. In our first semester, we had a class called Programming Concepts which taught us the basics on a conceptual level and had us first write our code with all variables being hard coded. From there, we were able to learn how to apply the four pillars of OOP by refactoring our code to use inheritance and slowly start encapsulating our code as we added more features. In our second semester, our class was simply called Object-Oriented Programming and that’s when the rest of our features were added to complete the application. Our third and final semester of OOP related courses was called Object-Oriented Design and in this class we were tasked with creating our own program from scratch using three different design patterns. (Old description -- Our third and final semester, our class was called Object-Oriented Design and it was in this class that we were taught about design patterns such as Singleton and Factory patterns as well as learning about anti-patterns such as Blobs ('God Objects'), Spaghetti Code, and Cut/Paste Programming. For our final project in that class, we were tasked with creating a simple application using three design patterns. I created a simple text-based game using Singleton to create a single instance of the game - Factory pattern to create different objects/values used in the game, and Builder to create the a 'container' of sorts to hold the objects created by my Factory.)

C# card – C# was the language that was taught throughout more classes than other languages. We were introduced to C# in our OOP classes with our Zoo application and continued to use it in our more advanced projects in Database classes and other group projects like Capstone.

Read more – We were primarily taught C# during our OOP related courses, but it was also used briefly in some data related courses. We focused more on how to apply the four pillars of OOP rather than the conceptual ideas behind them, but in my continued learning after school ended, I have found a better understanding of them. I spent some time messing around with Unity and using my past 3D modeling experience to try and mess around with a game as a project, and although the task seemed too daunting for me at this stage in my career, I gained a much larger appreciation behind the concepts of the four pillars of OOP while trying to comprehend how I would create classes and interfaces using C# to program any sort of ideas that I had. I would still like to tackle a few projects involving Unity in the future, but for the time being, I’ve decided that my time now would be better spent focusing on career development than learning the subtleties of Unity.

ASP.Net Core card – ASP.Net Core was the framework that was taught the most during the program. It was the primary framework that we used in our solo and group projects for our Software Architecture course as well as being used intermittently in other courses too.

Read more – ASP.Net Core, as well as Entity Framework Core, was introduced to us as students in our Software Architecture course. We were tasked with creating two applications. First, we refactored a previous toy store application from our Collaborative Application Development course to use MVC, ASP.Net Core, and Entity Framework in which a user could add toys to their cart and a checkout page where they could “buy” the products. This was also when we were taught how to access and use an API, as well as connect an MS SQL database to the application to store previous purchases and keep track of product quantities. During this time we also worked on a group project of our own choosing and were tasked with doing the same thing, but as a group without much guidance.

Entity Framework Core card – Entity Framework Core was the Object-Relational Mapping framework that we were primarily taught during the program. It was the main framework that we used in conjunction with ASP.Net Core in our classes such as Software Architecture.

Read more - Entity Framework Core, as well as ASP.Net Core, was introduced to us as students in our Software Architecture course. We were tasked with creating two applications. First, we refactored a previous toy store application from our Collaborative Application Development course to use MVC, ASP.Net Core, and Entity Framework in which a user could add toys to their cart and a checkout page where they could “buy” the products. This was also when we were taught how to access and use an API, as well as connect an MS SQL database to the application to store previous purchases and keep track of product quantities. During this time, we also worked on a group project of our own choosing and were tasked with doing the same thing, but as a group without much guidance. I KNOW THIS IS THE SAME TEXT with the opening sentence revised. Not sure how to make it different since both techs are used together.

MS SQL Server card – Microsoft SQL Server was the primary database management system that was taught during the program. We were introduced to MongoDB in our Open-Source Web Dev course, but we used MS SQL in all our data related courses.

Read more – We first started learning about MS SQL in our first semester course – Data Concepts – and continued to learn about it more in depth during our Database Design and Advanced Data Management courses. In Data Concepts, we learned a lot about syntax, keys/relationships and diagrams - such as a Crows Foot diagram. In Database Design, we learned the importance of design processes and spent a great deal of time focusing more on topics that were only introduced to us before – such as normalization and data integrity. Finally, in Advanced Data Management, we were introduced to Power BI and more advanced concepts relating to query optimization such as the use of indexes. Although we were taught the majority of our knowledge in the three course mentioned above, we did take that knowledge and use it in other projects throughout the program to reinforce our knowledge and proper techniques.

Power BI card – Power-BI was taught in our final data related course – Advanced Data Management. We were not introduced to any other data visualization software, but we spent a majority of the semester learning how to use Power BI and a large chunk of its main features with a database of our choice.

Read more – Power BI was the only data visualization software that we were taught while in school during our final data related course – Advanced Data Management. During that time, we picked a database of our choice from a website provided to use by the instructor, and after learning more about how to improve our query optimization, we spent about two-thirds of our course learning Power BI and data modeling so that we could present the information in a manner that could be used by non-developers to create reports that could be used for data-driven decisions – another topic we were taught during the course.

Blazor card – Blazor was only introduced to us as students in our Capstone project. We were tasked with starting a new project, rather than working on an older project from previous semesters, and our instructor tasked us with researching and implementing Blazor as the web framework to use for our Lego application.

Read more – Blazor is not a framework that had dedicated course material to learn from in school. It was introduced to myself and my group for our Capstone project and we were entirely reliant on each other to learn what was necessary to build the application given to us by our instructor. At the beginning of the project, I was tasked with researching and deciding whether to build a Server-Side app or a Web Assembly (WASM). After much discussion between the team and our instructor, we decided to go with a WASM app for three main reasons. First, the starting template to a WASM seemed more similar to our past MVC projects. Second, our instructor liked the idea of the application being able to run offline. Lastly, we had limited resources available to us for handling server-side processing and we believed that offloading such processes to the client-side would allow us to handle such large request with our API queries to the BrickLink database that we used – containing over 77,000 individual parts. This did lead to load times that would most likely have been shorter had we built a server-side app, but I still believe it was the best option given the resources that we had available to us.

React card – I was not taught React in school, as it was introduced into our Open-Source Web Dev course the semester after I completed the course. I am entirely self-taught when it comes to React, and I created THIS website as a project to learn React.

Read more – React is something I had heard about quite a bit in school, but it was only introduced to the program the semester after I had taken the course which now teaches it. It has been quite the experience trying to learn React on my own since the idea of Fundamental Programming was not a topic of discussion during my time in the program. I have found React to be very interesting with how it uses components in a reusable manner, similar to how I view classes to be reusable objects like we were taught in our OOP courses. I’m also intrigued by the use of one-way binding when passing parameters from parent components to child components and how that can keep data safe from unwanted changes. But what I’m most fascinated about is the use of React Hooks. I’ll admit that I don’t have the deepest understanding of how they work, but it remains one of my favorite aspects of React to try and implement as I continue to learn more about it.

PASSION:

Adobe card – I learned the Adobe Suite with the help of a friend who I partnered with to produce a handful of projects with local comedians and musicians in the Madison area. I primarily used Premiere Pro, Photoshop, and Audition to create most of the productions, but I quickly fell in love with the capabilities of Illustrator and After Effects.

Read more -

Photography card – During the early years of multi-media production, I tended to stay away from the camera, but as I continued to learn more about production, I became fonder of being behind the lens. I spent countless nights going to local concerts to take photos of bands during their performances.

Read more -

Animation card – My passion for animation didn’t start immediately, but the more I learned about media production, the more I became interested. After taking the Animation Bootcamp with School of Motion and learning the 12 principles of animation, I quickly fell in love with the art style.

Read more -

HOBBIES:

Music card – Although I never truly learned how to play an instrument, a lot of my friends growing up did. My love and understanding for music has earned me the respect of some of my closest friends who are musicians and they often ask me for my input on their new projects.

Read more -

Comedy card – I have been a fan of stand-up comedy for as long as I can remember. I used to have a collection of VHS tapes containing all the half-hour specials of Comedy Central Presents, and I believe my love and understanding for the art is what made the local comedians I’ve worked with in the past so willing to work with me on my past productions.

Read more -

Disc Golf card – I was introduced to disc golf almost 10 years ago, but it wasn’t until recently that I became a more avid player. Over the 18 months or so, I have travelled around the state to play at different courses, and I was able to was able to shave off about 6 or 7 strokes from my average at what I would consider my “home course” at Northcentral Technical College.

Read more -