

# Shannon Mettry

Written Interview

## Education

- **How did you fare in high school mathematics, physical sciences and computing? Which were your strengths and which were most enjoyable? How did you rank, competitively, in these subjects?**

To be honest, I have never been “good” at math. Unfortunately, most schools only cater to one or two types of learning, when there are five in total. Thus, leading me to be my own teacher and often reteaching myself school subjects. My lack of knowledge in mathematics never stopped me from trying, many times I would spend hours working in the library after school with a tutor, in order to fully get the subject down. Experiences like this, taught me that any subject can be dominated through consistency, hard work, and learning how to learn. Further, my continued learning of web development has taught me this.

Although I have not been the best at math in the past, I currently excel in learning and logical thinking and problem solving. My strengths have always been my perseverance and setting goals. For example, throughout elementary school and middle school, I ranked low in math and English. However, when I entered highschool, I had a better understanding of how to learn and work hard. On account of this, I ended up enrolling in Advanced English, and AP English courses and, as well, signing up for statistics, which I fell in love with (obtaining high marks in all classes).

Other enjoyable classes I took were Art and Public Speaking as both allowed me to be creative and share my creativity with others.

- **At high school, what leadership roles did you take on?**

I participated in school leadership role activities such as creating a float for a parade and riding around in it for the town. I also participated in a few funny presentations in front of the entire high-school.

I was the type of person who always had their eyes set on things outside my comfort zone such as doing a presentation in front of the entire school, picking classes that my friends weren't in or trying out new sports even when I didn't know anyone or how to play. What made me a leader was my ability to not pay attention to what others thought but focus on what I found fascinating, insightful, and to do things that could make me grow. I did this by joining soccer and the track and field sport, participating in four different events: 100 meter, 200 meter, 4x4 relay, and the long jump.

In high school throughout university, I always played the leader when it came to group projects. I am all about organization, setting timelines, and understanding each

other's roles within the group. As a leader, I like for us to be open and cohesive, with set goals and times to get things done, with meetings in between to discuss where we are on the project.

- **What sort of high school student were you? Outside of required work, what were your interests and hobbies? What would your high school peers remember you for, if we asked them?**

I have always been very diligent, even as a young child in elementary school. After school, I would work on my homework straight away so that I could play right afterwards. It was very difficult to enjoy myself knowing there were things I had to get done.

I had an agenda in highschool where I wrote down all the assignments I had to do and when they were done and I would start working on them as soon as I got home. On account of this my friends always saw me as a studious and consistent individual and my school peers would describe me as studious, trustworthy, responsible with a dash of fun.

Outside of school, I played sports. I played coed soccer, indoor soccer, and I played soccer for our high school team. I also dabbled in kick boxing and participated in school leadership activities.

- **Which degree and university did you choose, and why?**

At first I chose communications / broadcasting because I enjoyed digging deep and getting to know individuals and the outside world and discussing topics in depth. Then I took my first sociology class and fell in love with the topic because it allowed me to understand people, groups, and society on a deeper level than communications. I ended up expanding my studies and earned a Master in Social Science Quantitative Research at the University of Carlos III of Madrid. I loved the research aspect that this master offered and it allowed me to excel my writing

- **What did you achieve at university that you consider exceptional?**

In the United States it is quite normal to work while studying at university. All throughout university I was studying full time and working at least one job, part-time. Throughout my university I was able to maintain a high gpa while working part-time and at times working two jobs while studying full time. Furthermore, I was on the Honor's List, while in university, which signifies recognition for excellent marks, having a gpa above 3.5.

## Web Engineering Experience

- **Which libraries and frameworks do you think will succeed in Web development tool sets?**

I would succeed in JavaScript, React.js, and debugging code. I am a very inquisitive individual who is very curious and investigative. I like to dive really deep into the subject and I look at web development as a puzzle. I have always been fascinated with how things work, taking things apart and putting them together. I have always been a person who loves building. Thus, gaining more skills in JavaScript will allow me to build better and greater things.

- **Describe your experience of web programming - JavaScript, Typescript, React, CSS and Python in particular.**

I have created over 20+ projects with HTML, CSS, and JavaScript. I love HTML and CSS and I love how JavaScript can enhance your website to another level. After learning HTML, CSS, and JavaScript, I went on to learn React.js, TailwindCSS, and CSS preprocessors such as SASS and LESS. I am currently advancing my knowledge on JavaScript backend on the server side. I am sharpening my skills working with Node.js, and Express.

Typescript and Python are excellent coding languages that I have heard great things about. I cannot wait to start learning them and utilizing them in my side projects. I think it is best to have a solid foundation of JavaScript before moving on to a new language. Although, I have checked out Java and the syntax is similar to JavaScript. Thus, I have an inclination that once an individual is solid in one programming language the logic is the same for all others, it is only the syntax that needs to be learned.

- **What are your thoughts on differences between utility based frameworks (such as Tailwind CSS) and component based (such as Bootstrap)**

Bootstrap is excellent for building responsive, mobile-first projects on the web which saves a lot of time building. Contrary, Tailwind is excellent for utility first for UI development which also makes building faster and much more simpler.

The main difference between Tailwind and Bootstrap, is that tailwind is not a UI kit. Tailwind does not come with pre-designed things to use to build your site. Tailwind leans more toward customizability for the framework and Bootstrap is best for responsiveness.

## Software Engineering Experience

- **What kinds of software projects have you worked on before? Which operating systems, development environments, languages, databases and frameworks?**

Software Projects for clients:

Wedding Website

Work Portfolios

Shop Websites

Country Guide App

Operating systems : MacOS

Development Environments: GoogleChrome | Visual Studio Code | Hosting: Vercel & Netlify

Languages: JavaScript

Databases: MongoDB

Frameworks/Library: Reactjs

- **Outline your thoughts on open source software development. Have you been an open source maintainer, and can you point to those projects?**

Open source software is absolutely amazing! The fact that open source is open to everyone so that they can view, change, extend, or distribute it, is so fascinating. In my master program, we wrote many papers using open source data. We would download the data, clean the data, run regressions then interpret our findings. All this was done on Rstudio and Stata.

I have several papers that I used using open source data. They are available upon request.

- **What is your proudest success as an engineer, or leader?**

My proudest moment as an engineer was when my bootcamp teacher asked me to teach at the coding bootcamp. He told me he saw potential in me and he admired the way I problem solved, always with a positive and inquisitive mindset.

- **Outline your views on the role of an engineering manager in shaping a high functioning team.**

I do not take managing lightly. To be a conducive and successful manager, one must know that they are in service to their team. The engineering manager must be encouraging, dedicated, but most of all compassionate and empathetic. An engineering manager must have solid technical and soft skills. Soft skills such as: verbal and nonverbal communication, strategic thinking, feedback and criticism, leadership, emotional intelligence, and relationship skills.

It has been shown time and time again that companies with strong leaders are more likely to be successful and successful companies attract a strong workforce. A business that is seen as a leader among its competitors has greater chances for longevity, providing job security for their employees.

- **Describe your experience with microservice architectures - web front ends, REST APIs, data stores, event processing and other kinds of integration between components. What are the key considerations for architecture, maintainability, and reliability in these large systems?**

While there are literally dozens of ways to implement a microservices architecture pattern, three main topologies stand out as the most common and popular: the API REST-based topology, application REST-based topology, and the centralized messaging topology. I am most familiar with the REST APIs, as I have used them on numerous projects used for: HTTP requests to access and use data. That data was then used to GET, PUT, POST and DELETE data types, which refers to the reading, updating, creating and deleting of operations concerning resources.

The key considerations for architecture, maintainability, and reliability in these large systems is integrity and consistency. The integrity of the data the system operates on is of the highest consideration when designing a reliable and fault-tolerant architecture. The system should be designed to provide backups that maintain data integrity and all around consistency.

- **Outline your thoughts on quality in software development. What practices are most effective in software teams to drive improvements in quality?**

Research, consistency, and teamwork!! I cannot stress this enough. Before starting any project, the best thing to do is your research and understand how and why you are going to build a certain way.. Another important practice is to write clear and concise code that is readable to developers with helpful comments. Lastly, in order to make sure everyone is on the same page, there must be meetings throughout the process to evaluate where we are on the project, how much time is needed for each task and what is working / not working.

## Context

- **Outline your thoughts on the mission of Canonical. What is it about the company's purpose and goals which is most appealing to you? What is risky or unappealing? Are there any elements of the company goals that you are unsure about?**

Canonical's mission is to deliver their open source to the world. Canonical is part of the biggest change in technology history as their open source plays a crucial role in broadening the benefits of open source to more people. Delivering the world's best open source experience from platform to application is Canonical's mission.

I believe that when a company focuses outward and their mission is greater than themselves or profit, that is when they are most successful. I want to be part of a team that is all about transforming the future for the better. I want to be part of a team that takes pride in what they do and works with integrity.

I absolutely love being a web developer and I am very passionate about what I do and I take pride in my work and accomplishments. I enjoy building new and innovative web apps and I love discussing new technologies with others. I embrace challenges and have the communications skills to work at Canonical. Canonical's values align with mine, in that we both focus on technological advancements for the better.

I want to work for a company I can grow in. This is always my aim when considering a job position. If there is no room for growth within a company then that is something that would be unappealing to me.

- **Who are competitors to Canonical, and what does Canonical need to change to be a more effective competitor?**

Canonical's competitors are: CoreOS, Heptio, Docker, redhat, MontaVista Software, Hashicorp.

To be a more effective competitor Canonical needs to include applications. They must extend to all packages running on Ubuntu. Large app stores tend to experience revenue streams and control in the industry.

- **What does Canonical need to change to be a more effective competitor?**

After reading You Were Born Great by Bob Proctor I learned that a positive self-image is critical for obtaining success.

The leader, whoever is leading the company must first already believe they are number one. With this in mind, the leader and the company will act as if they are the number one open source and deliver, and work as such. The company will set up standards that the top competitors have and implement them.

- Why do you most want to work for Canonical?

Working at Canonical will allow me to be innovative and logical. I will have the opportunity to grow and sharpen my skills. I want to be challenged because that is how you grow, by stepping out of your comfort zone. Further, I want to collaborate with others who are just as motivated and excited about tech. Canonical has many projects, globally and I want to participate in them.

- Which Canonical products and services would you most like to work on?

I would love to work for Debian or Launchpad as both are innovative and have room for knowledge growth. I will have the opportunity to learn about this service and grow not only as a developer but have the opportunity to learn beyond my position.