

# HARRISONBURG BUSINESS PERSPECTIVES

## ISSUE #2

By Peirce Macgill, Harrisonburg Economic Development

Canvex is a new company on the Harrisonburg technology scene. Canvex's mission is to bring a competitive advantage to businesses in the Shenandoah Valley (and beyond) by using drone technology to provide faster, more accurate and less expensive data. The bottom line: they are an aerial data acquisition company. Their main services include aerial photography and video, 3D modeling, agricultural data acquisition and subcontracting for surveying companies.

Canvex provides an excellent example of capturing the entrepreneurial talent at James Madison University to grow new businesses here in the city. After graduation, the Canvex team could have chosen to start their company in northern Virginia, Hampton Roads or New Jersey, but they chose Harrisonburg. I sat down with the three co-founders to find out why and to find out more about this exciting early-stage company.



(left to right) Caoimhe O'Sullivan Roche, Nick Sipes, Sarah Paynter

### **Tell me about your academic and professional background.**

Sarah: I graduated in May from JMU. I was a psychology major with a minor in writing. I've done grant writing and internships, and some program management for non-profits. I got connected with Caoimhe and Nick while taking a class at JMU's X-Labs. Through the class, we ended up doing the Virginia Drones Project together. The point of the class was to use a drone to solve a social problem. Our project was working with a PhD candidate in Cartagena, Colombia, who wanted to do a structural analysis of the historic walls down there. Instead of using conventional methods, we used a drone to more accurately and efficiently make a 3-D model of the walls for his research. It's a protected heritage site in Columbia, so the PhD candidate is seeking ways to curb the walls' erosion. It was an amazing experience to work on the project for a week and Canvex was born out of the project.

Caoimhe: I just finished this past spring with a Bachelor of Arts in Writing, Rhetoric and Technical Communication from JMU. My second major is Industrial Design, which I will finish in December.

The writing experiences I've had have been interesting. I've done a lot of freelance writing. The industrial design experience is also interesting, because I've done some writing in the community for a local market food truck, for a non-profit in Roanoke, the drone project and some other projects for the agriculture community.

Nick: I also graduated in May from JMU with a Bachelor in Science and Physics. I did some freelance engineering last summer. I've delivered pizzas, and I've worked at JMU doing materials science research and serving as a teaching assistant.



The walls of Cartagena, Columbia

**When did you move to Harrisonburg?**

Sarah: I moved here in August, 2013. I previously lived in New Jersey, just outside of New York City.

Caoimhe: I also moved here in August, 2013 and spent most of the subsequent summers here. I'm also from Jersey - Mercer County.

Nick: I came to Harrisonburg in 2015, but have stayed here every summer and never left. I'm from Chesapeake.

**Give me an overview of Canvex and your role in the company?**

Sarah: Our primary identity is aerial data acquisition. We use a drone to acquire that data and we can attach a camera and sensors to capture a variety of data. Also, using an aerial perspective allows us to collect data in a more efficient and accurate manner than you would otherwise get. We are working with farmers, real estate agents, academics and hoping to get into construction and engineering areas as well. As for my role, I handle the business aspects, including marketing and networking.

Caoimhe: Nick and I perform similar duties. I'm more back end on projects doing CAD editing of the 3-D model and doing prints of it, and any other editing. I also handle any post processing. By duplicating some duties, we can run multiple projects simultaneously and I can handle back end on some and Nick can handle back end on others. And, of course, we all have a role in sales.

Nick: We want to be flexible, so we're still figuring out what we are. Since summer started, we've had a job making a model of the new City Hall and the historic Municipal Building in Harrisonburg. Since then,

we've had a variety of opportunities presented to us and, so far, we haven't said no to anything. We're seeing where we can get the best traction and define ourselves based on that traction.

I also do the drone flying. I'm the only one with a pilot's license, so I'm the only one allowed to fly by law. I received my license back in June. But it's odd, you don't need a license to fly for fun, but if you fly for commercial reasons, you need a license.

### **Can you tell me more about the Municipal Building project?**

Nick: Oh it's a bear. There's a lot of learning in the process. The building is not currently occupied and there's a lot of history tied to this building. The JMU professors we are working for want to capture the history for a book they are writing, so they tasked us with collecting data and making a model. They (the professors) are having an exhibition in August, where they will release the book and show the pictures and history. They want the Municipal Building to be featured in the book because the building captures different time periods of Harrisonburg's history. So with a 3-D model of the building, you can get a more accurate look and feel of the different phases of the building's construction.

Sarah: It's called the Urban Renewal Project, supervised by Dr. Aaron Price and Dr. Kevin Borg at JMU. Their idea is to represent Harrisonburg's history through the lens of its architectural evolution over time and they're also interested in the way our community has changed. Back in the 1920's, people represented the important places in town through postcards. Today, we can use 3-D modeling to represent our key buildings.

The original software we were using for the 3D modeling took months to process and we were able to find a better process to reduce that time period to one day. We've also refined the way we fly and capture the right shots to produce the best quality 3-D model when it's finished.



A drone's-eye view of City Hall and the Municipal Building

### **What made you decide to take the jump and start a business?**

Sarah: It was a lot because of the encouragement of our professors in (JMU's) Center for Entrepreneurship. Our professors kept saying, we could really start a business with this. And when we came back from Columbia, we all sat around, and the professors said, okay you're going to start a business from this, right? And we said, yeah sure, maybe a side business until we graduate, but then we met with Patrick (Patrick



McQuown, Director of JMU's Center for Entrepreneurship) and he said no, you can't do this on the side, you've got to commit to this full-on. And we responded to that challenge and decided to go for it.

Caoimhe: The opportunity was there. The big question when you graduate is what do you want to do next? I think that it's an easy choice to take a steady job, because there is certainly less risk involved than in starting a business. A job has things in place, a regular salary, benefits, future roles. But having a chance to start something of your own, be autonomous and make money with your friends if you're lucky enough to be prosperous; that's something you shouldn't pass up. We're young and we have little, to nothing, to lose. If you're going to fail, might as well fail in your early 20's!

### **Why did you choose to start the business in Harrisonburg?**

Sarah: We felt like we had a lot of resources here, both through JMU, the X-Labs and the Center for Entrepreneurship. And also the resources in the town and the networking, we had already started to build that, so we felt we had a good foundation here. It wouldn't have made sense to uproot ourselves, when we've met so many people in Harrisonburg that can help. Also, we have more to offer here. If we were in northern Virginia, there are other companies offering similar services, but not so much in this area. So we can offer something fairly unique to the community here. And, the agricultural market of the region is perfect for us. We are excited about creating our most sustainable relationships with the farmers. It's a great potential market for us.

Caoimhe: We have a lot support here, which is awesome. There are a lot of people rooting for us.

Nick: Really, there was just no reason to leave.

### **What do you like to do in Harrisonburg?**

Sarah: We like to go to the Farmer's Market. On First Friday's I like to go to the art galleries. The community events going on are usually pretty fun. Forbes has great shows. I like the orchestra shows and any instrumental shows. I also enjoy tailgating at JMU football games.

Caoimhe: I'm a frequenter of the downtown businesses. I love going to the Artful Dodger, Billy Jacks and the Court Square businesses. I love going to movies at Court Square Theater. If you haven't been there, it's awesome. There's a really cool community in downtown. I got into a lot of the underground music as well, and art shows in houses around the city.

I also try to partake in the outdoor adventures in the area. I have to remind myself, since I'm a big biker, to go on hikes and biking trails. There are so many. And I'd like to go see a show at the Forbes, that's on my list.

Nick: I like to go hiking. I pretty much go to Skyline Drive (Shenandoah National Park) to do different hikes, like Mathew's Arm. I also like going to JMU football games.

### **Where's your favorite place to eat?**

Sarah: I really like Cuban Burger, as well as Billy Jacks and Jack Browns. I love Ruby's Arcade. That is my favorite place in town.

Caoimhe: The Little Grill. That place made me love Harrisonburg! It showed me that this is a cool community. I love going there for breakfast, and they have really good Mexi nights. And Ruby's is pretty cool. I like the new space at Magnolia's. It's great to have some rooftop dining in town.

Nick: I would have to also say The Little Grill.

### **Do you have any favorite local stores?**



Sarah: Harrisonburg has awesome thrift stores, more so than any other town I've seen. I like to go to all of them. Gift and Thrift is probably my favorite, but I also like Mercy House and really all of them.

Caoimhe: Babylon on Main Street. I also love Ragtime Fabrics. It's a massive warehouse of fabrics and it makes me want to sew clothes. And I like the Goodwill thrift shop. I got a really sweet Jimi Hendrix shirt there.

Nick: FoodMaxx, I like that place. Other than that, I don't do too much shopping.

**Tell me about your commute to work?**

Sarah: What commute? My commute is just down Main Street, so it's really easy.

Caoimhe: I live a 5 minute bike ride away. Whenever I'm able to, I like to bike to work. It's hard to do that in New Jersey and I realized the biking infrastructure there is not in place, so I always stuck to my neighborhood when I lived there. It's so much better to bike in Harrisonburg. It's a cool biking community.

Nick: It takes me an average of 2 songs to get here. It's great, it's so quick. I wake up 15 minutes before I need to be somewhere and can make it on time.

**Finish this sentence: The best thing about Harrisonburg is....**

Sarah: ....the community. It's so vibrant. There are so many fun community events going on. On Saturday mornings, you have the Farmer's Market and you'll always see a lot of people you know there. Coming from New Jersey, the towns kind of blend together there and so I was a lot less plugged into my community. New Jersey may have had more things going on, but I wouldn't know about them or feel a draw to them. So I actually do more things here in Harrisonburg because I know the community well and am more plugged in.

Something else I appreciate is the diversity. It's such a unique place. You have the people who have lived here a long time, new people who have moved from other cities and students who have stayed here, but you also have a large refugee community. That was kind of unexpected for me coming here - to see Harrisonburg be as diverse as it is.

Caoimhe: ....the eclectic nature of the community. There's such a diversity of people here. You get the student diversity, the adults who have been here for generations, people who have just moved here and the refugee and immigrant community. You can see it reflected in the businesses and I think that is really awesome. I also love that there is a sense of community identity with Main Street, I know it's been an effort, and I think it's important to have that community core. What we're finding here is business is booming, the economy is doing well and people are generally happy. That is part of what makes Harrisonburg such a welcoming place.

And you can't beat the views. I'm always on the lookout for spots with a great view, either of the mountains or the city or JMU. There's a great spot over near EMU with a nice view of downtown. We recently went to Mr. J's, got some bagels and went up to the hill at EMU and just sat. It was so relaxing to sit back and enjoy the view.

Nick: ....the mountains. As a kid in Boy Scouts, we would drive from Chesapeake, about 5-6 hours, to go hiking for a weekend. And now those mountains and trails are my backyard, so that's pretty cool.

*Learn more about Canvex by visiting: [www.canvexllc.com](http://www.canvexllc.com)*

