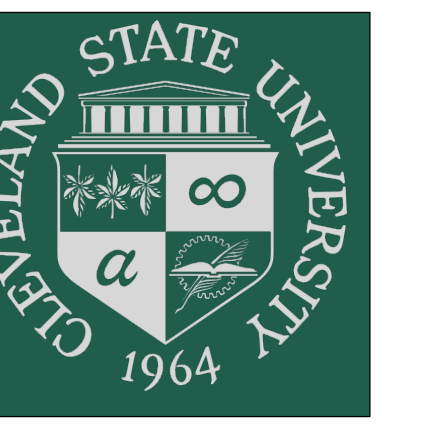


# Information Solutions Coop at Lubrizol



Cameron Flack – Washkewicz College of Engineering, Computer Science

Choose **Ohio** First

## INTRODUCTION

I am Cameron Flack, a computer science major at Cleveland State University. I was given the opportunity to work at Lubrizol, within their custom application team in the Information Solutions department. I worked with them during the Spring 2023 semester.

## PROFESSIONAL/LEARNING OBJECTIVES

- Improve my soft skills: Communication, collaboration, organization, and problem solving
- Build business acumen by making connections with various leaders and peers within the organization
- Learn more about the software development process
- Work with automation flows inside the company to streamline business tasks
- Examine gathered data to aid in making well informed business decisions

## RESPONSIBILITIES AND PROJECTS

Work with several departments and teams within Lubrizol to build customized solutions inside the Microsoft Power Platform to suit their business needs

- The Networking Team – Needed an application to easily perform CRUD operations on their servers. This application facilitates management and auditing of network devices
- The Chemical Labs – The lab safety engineers needed a digitized way to perform their inspections
  - Their current application was out of the box – not customizable, oversophisticated, and generic
  - A fellow coop and I rebuilt their application with custom enhancements to better perform lab inspections

Support citizen developers, those within the organization who do not necessarily have a background in computer science or programming, but could benefit from creating customized apps in the Power Platform

- Networks – Provided code training, debugging, and governance assurance



Figure 1. Lubrizol Wickliffe Headquarters.

## APPLICATIONS OF COURSES

- Data Structures and Algorithms – After this term, I have realized how much work is done with data in the industry. This course helped me understand data, how to organize it, and how to manipulate and examine it.
- Software Engineering – While working with various other teams at Lubrizol, concepts from Software Engineering helped by tabulate specifications and organize development timelines.
- Database Concepts – Although I have not yet taken this class, I learned a lot about databases and relations between them. I will likely go into this class already knowing a lot of the basic concepts.

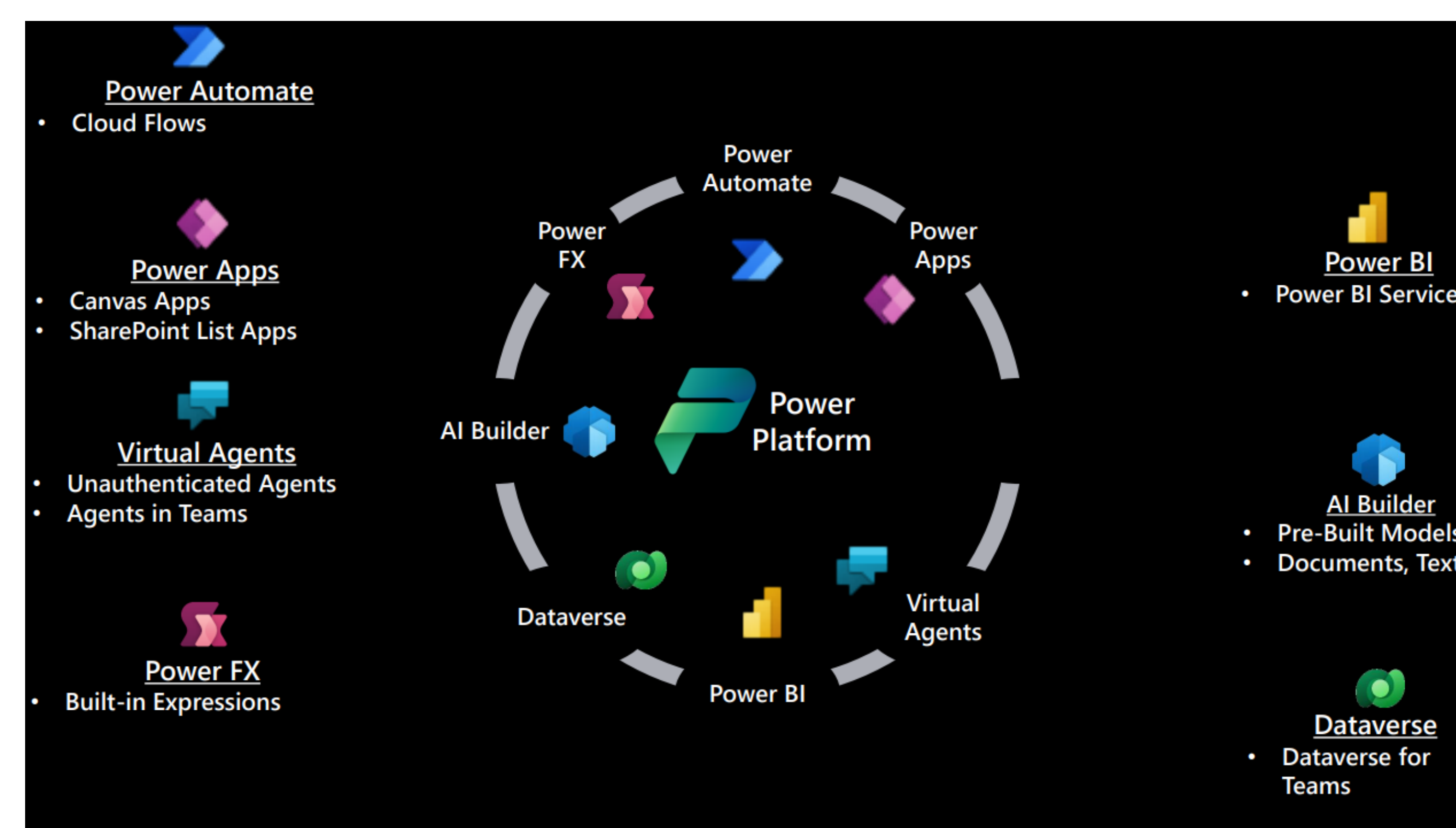


Figure 2. Power Platform

## LESSONS LEARNED

It was fun applying the topics I have learned in my classes in my daily work. I also learned a lot of new things about databases and the software development process. This was my first experience in the engineering industry, I gained a lot of professional communication skills. Everything that I worked on was important for various teams, so I learned critical business skills. Using data first technology, I learned a strong ability to architect cloud data sources, that facilitates proper low code development



Figure 3. Lubrizol Products.

## FUTURE CAREER OBJECTIVES

Lubrizol has helped me gain many skills in different areas, all of which I am interested in for a future career. I wish to keep learning about the application of computer science and its many disciplines in the engineering and tech industries.

### Acknowledgments and References

Brian Goff – Senior Manager  
Wiley Bozada – Application Developer  
Theodore Stori-Desmond – Application Developer  
Erik Earl – Case Western Reserve Custom Apps Coop Student  
Max Shenk – Rochester Institute of Technology Data Mining Intern and Citizen Developer

