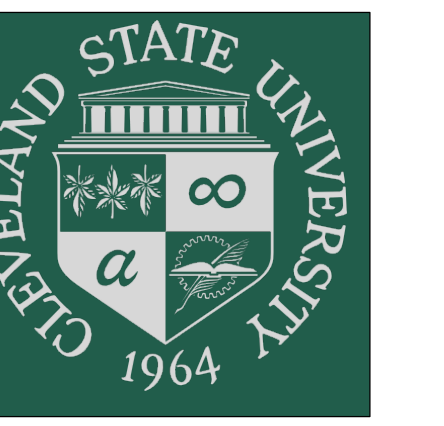


Information Solutions Coop at Lubrizol



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.

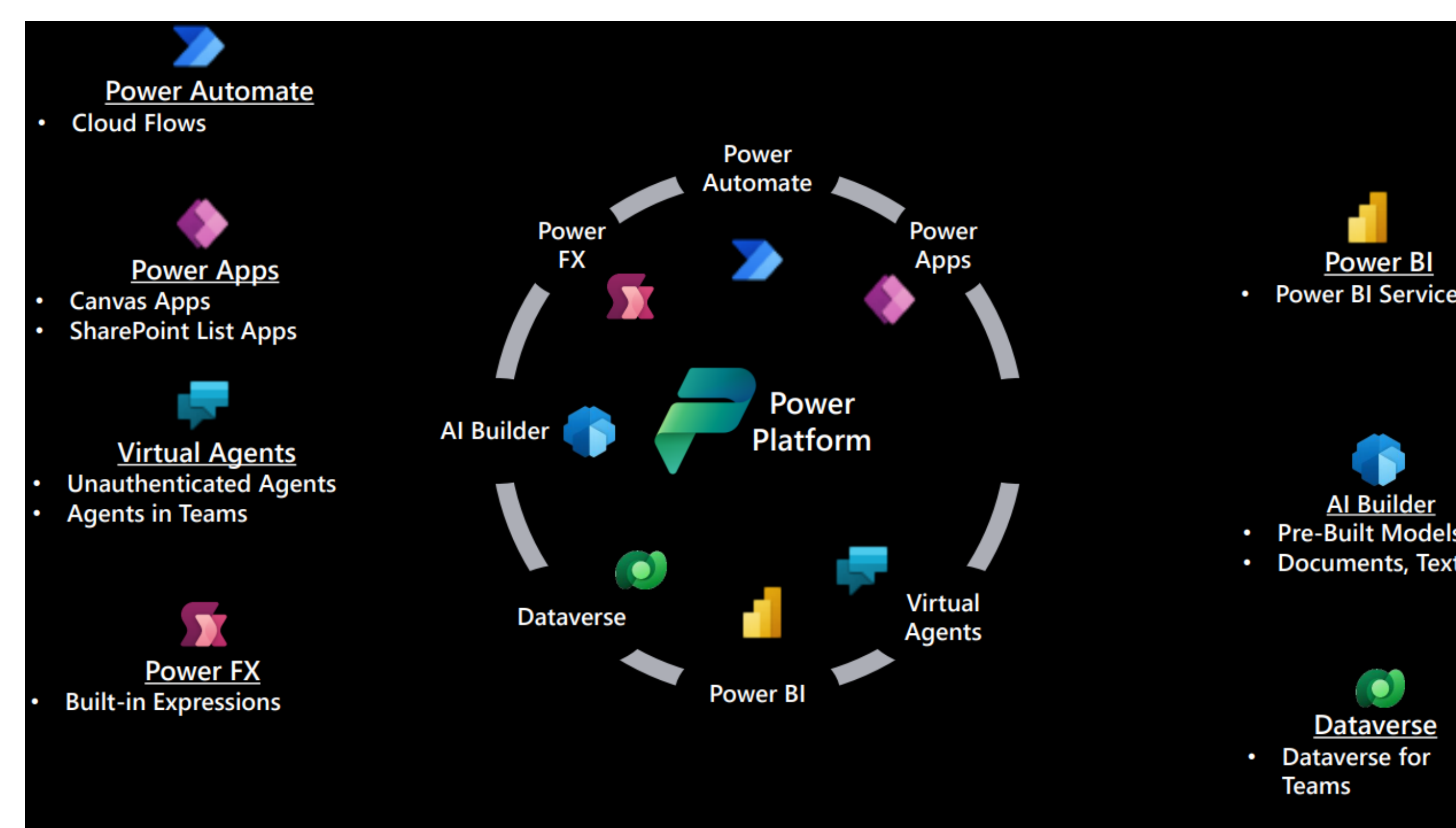


Figure 2. Power Platform

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

