Kieron von Buchstab

Aerospace Engineering Student

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Ottawa, Ontario

Engineering student with a strong background in problem-solving, data analysis, and programming. Seeking to leverage technical skills and analytical expertise in a finance position, with a particular interest in financial analysis and investment advisory.

Education

Carleton University, Ottawa, Ontario || Bachelor of Engineering, Aerospace || Class of 2026
Pierre Elliott Trudeau High School, Markham, Ontario || Class of 2021

Skills

Hard skills	Soft skills
Programming: Proficient in Python, Pandas, NumPy, PyXML; Knowledgeable in OOP; Built multi-threaded programs.	**Communication:** Effective communicator; experienced in collaborating with international contractors at Lockheed Martin.
Data Analysis: Experienced in analysing and manipulating large datasets using Python and Excel.	**Time management:** Have managed to juggle my research, my degree, and my social life as an engineering student. I've also built a web app I use to manage time.
Microsoft Office: Proficient in Excel (including VBA), Word, and PowerPoint; Built and maintained complex Excel models.	**Problem-Solving:** Strong analytical and problem-solving skills honed through engineering projects and coursework.

Publications

Full list of publications available at kieron.ca/pubs

- von Buchstab, K., & Milam, J. (2023). *Commercial off the shelf ground stations for use in rapid testing and innovation of space systems*.
  - Studied the use of ground stations for weather and agriculture predictions
- von Buchstab, K., Jurgutis, A., Lear, A., Jazebizadeh, H., & Burlton, B. (2022, September 2). *The Receipt and Analysis of Weather Data in a Simulated Martian Environment*. International Astronautical Congress 2022.
  - Presented in Paris, France - Analysed the effects of weather on Mars, demonstrating strong analytical and presentation skills.
- Jurgutis, A., Lear, A., Murray, M., von Buchstab, K., Jazebizadeh, H., & Burlton, B. (2022, September 20). *Design, Verification, and Validation of the Communication System of an Undergraduate CubeSat Mission*. International Astronautical Congress.
  - Explored the development and use of a student-built ground station, showcasing project management and technical skills.

Career History

Lockheed Martin - Systems Engineering Intern
May 2023 - Present

- Built extraction tools for retrieving and manipulating data.
  - Used Python and Selenium to extract regulatory data from PDFs.
  - Utilised Python, Pandas, and PyXML to manipulate Excel columns based on extracted data.

- Designed VBA scripts for data manipulation across Microsoft Office applications.
  - Created VBA script to convert Excel data into PowerPoint presentations.
  - Developed script to track deliverables and update cells/charts across sheets.
- Managed administrative duties at vendor meetings.
  - Presented biweekly deliverable statuses and addressed vendor inquiries.
  - Documented meeting minutes and followed up with vendors for action tracking.

MyRide901 - Social Media Manager
January 2021 - September 2021

- Designed and created multimedia content for social media platforms.
- Wrote engaging captions for posts on Instagram and Facebook.
- Analysed social media insights to target various demographics, improving engagement.

Professional Services Plus - Administrative Assistant
April 2019 - January 2021

- Tabulated and processed accounting data using Microsoft Excel.
  - Received, processed, and inputted accounting data into Excel spreadsheets.
  - Maintained the accounting database, ensuring accuracy and error prevention.
- Organised and reviewed monthly invoices.
  - Physically organised invoices by date and ensured no discrepancies.
  - Reviewed each invoice for errors and ensured accurate record-keeping.

Experience

Carleton University Satellite Design Project Capstone (CuSAT)
Nov 2021 - Present

The Satellite Design project is a final year project at Carleton University where students are tasked with designing a small satellite for use in detecting forest fires. I started working on this project in my first year, assisting fourth year students in building a ground station to communicate with satellites. Eventually I took over ground station development.

- Lead the ground station team, setting goals and overseeing development.
  - Managed finances and tracked expenses to ensure efficient use of funds, demonstrating strong financial oversight.
- Implemented and maintained software (C++/Python) for satellite communication.
  - Developed GUI modules as a full-stack developer.
  - Wrote auto-tracking software for geostationary satellites.
- Designed components in CAD for 3D printing and machining.
  - Created wiring layouts and PCB designs to optimise ground station wiring.

Scholify - Founder
June 2023 - Present

Scholify is a publishing company focused on publishing research papers for undergraduate university students, though research is accepted from all over. It was started in June 2023 to publish my own research papers as an undergraduate student.

- Designed and maintained Scholify.ca using WordPress.
  - Managed submissions and uploaded accepted papers.
- Oversaw financial operations, managing website-related costs and coordinating payments for accepted papers.
  - Demonstrated entrepreneurial and financial management skills.