Jacob **Brehm**

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Experience

Viewpoint Systems Inc.   *Buffalo/Rochester, NY, USA*
Systems Engineer   *Apr 2020 - Present*

- Working full-time as a contractor at a large aerospace and defense company in the greater Buffalo, NY area.
- Underwent extensive LabVIEW training covering topics such as advanced software architecture techniques and programming for National Instruments FPGAs and Real-Time.
- Provide software engineering support for the end user when system or programming issues arise.
- Assist in the maintenance, troubleshooting, and improvement of the automated test software on the customer's many test stands as well as the corresponding documentation.
- Implement, install, and operate the automated testing software on each test stand, and help the customer with the setup and verification of hardware if requested.
- Created, implemented, and continually support a version of the automated test software that could be run without hardware and used to construct test sequences on users' desktop computers.
- Developed software that provides the ability to test existing aerospace systems on the ground in an automated fashion via various operations as well as record data to the file system.

Young & Franklin Inc./Tactair Fluid Controls Inc.   *Liverpool, NY, USA*
Development Engineer   *Dec 2018 – Jan 2020*

- Saved 100s of hours of hands-on engineering time by creating a fully-automated research and development test platform from scratch using Python and object-oriented design methodologies.
- Developed Python software that provided full manual control of a digital motor controller, including the ability to communicate bidirectionally via Modbus and manage digital I/O using a tailored user interface.
- Independently created data analysis software with Python, such as a program that used Pandas and Matplotlib to allow engineers to quickly view, manipulate, and analyze multiple sets of data simultaneously.
- Aided design efforts by using Python and NumPy to analyze valve plug and seat designs in order to determine how much error was present in comparison to an idealized plug design.

Development Engineering Intern   *Aug 2018 - Dec 2018*

- Wrote 1000s of lines of Python code and developed scripts and applications that are still in use today.
- Developed computer vision software using Python that measures oil leakage with greater than 90% accuracy.
- Honed Visual Basic and SQL skills by improving and supporting a Microsoft Access application that logged time and organized documents.

Skills

Python • R • SQL • LabVIEW • MATLAB • NumPy • Pandas • Matplotlib • Tableau • Excel • Git • SVN

Education

Coursera   *Online*
Google Data Analytics Specialization   *Aug 2021*

Clarkson University   *Potsdam, NY, USA*
BS in Mechanical Engineering, Minor in Mathematics   *Aug 2014 – May 2018*
  GPA: 3.84/4.00

University of Leicester   *Leicester, England*
Study Abroad Year   *Sep 2017 - May 2018*

University of Technology Sydney   *Sydney, NSW, Australia*
Study Abroad Semester   *Mar 2016 - Jun 2016*