# Christopher Brenton

brentoncchris@gmail.com  •  (989) 513-3911  •  Hazel Park, MI  •  ccbrenton.github.io

## SUMMARY

Multidisciplinary and solution-driven engineer with 5+ years of experience leading innovation, managing teams, and leveraging data to solve complex problems. Recognized for tenacity driving value for stakeholders through BI solutions and fostering a data-driven culture. Eager to apply my innovative and analytical acumen to streamlining business insights.

## EXPERIENCE

**Autoliv** — **Mar 2021 – Present**
*Development Engineer* — *Auburn Hills, MI*

- Established and maintained a KPI Power BI app and data gateway for all North American engineering from VP level management to individual contributors streamlining project status insights and actionable strategy development
- Optimized a time reduction opportunity by creating a data analysis application in Python that automated test data cleaning and final report generation reducing completion time from a few hours to less than 5 seconds
- Presided as the global leader of illuminated emblems by supporting successful product development, defining internal standards, solving ad-hoc technical issues, and managing a team to increase domain expertise globally
- Championed innovation projects for airbag illuminated emblems as the lead engineer by directing cross-functional teams, coordinating with external partners, and managing timing within a planned budget
- Built an automated engineering data checklist using Excel VBA, conditional formatting, and data validation to streamline part flagging and reduce user input errors

**Autoliv** — **Jun 2018 – Mar 2021**
*Application Engineer / Development Engineer* — *Auburn Hills, MI*

- Managed product development for the successful launches of the MY19 Lincoln Aviator, MY20 Lincoln Corsair, and the first ever Rivian R1T/R1S steering wheel programs
- Directed product feasibility analysis, performed validation testing, conducted analysis on the resulting data, generated final reports based on the found conclusions, and communicated results to internal and external stakeholders
- Identified trends in the feedback loop between predicted and actual results for an armature bending model leading to a model parameter tune for better future correlations and a passed test with a 20% thickness reduction
- Constructed a specialized calculator for all engineering teams based on the Steinhart-Hart equation for converting resistance to temperature using Excel VBA to correct improper lab calculations

**Autoliv** — **May 2017 – Aug 2017**
*Development Engineer Intern* — *Auburn Hills, MI*

- Designed an innovative method for prototyping parts utilizing 3D printing that resulted in $60,000 in savings
- Coordinated a collaborative root causing effort to solve a complex plastic deformation issue by utilizing problem-solving analysis tools and working with a diverse team of engineers

## PROJECTS

**Pups and Pubs - Brewery Analysis With SQL, Python, and Tableau** — **Jul 2023**
Conducted descriptive analysis on a brewery database with PostgreSQL, enriched data by web scraping a dog-friendly brewery dataset with Python, and built an interactive Tableau dashboard identifying 98 dog-friendly Michigan breweries

**DJ With Data - Spotify Music Analysis in Python** — **Jun 2023 – Jul 2023**
Developed a predictive model for matching playlist music trends utilizing Python, the Spotify API, and statistics with Chebyshev's inequality for a dataset of 6,138 songs resulting in a list of 2,255 song recommendations matching the model

## EDUCATION

**Michigan State University** — **May 2018**
*B.S. in Mechanical Engineering, Minor in Computer Science* — *East Lansing, MI*

## CERTIFICATIONS AND SKILLS

**Certifications:** Google Data Analytics Professional Certificate
**Hard Skills:** Python, Power BI, PostgreSQL, VBA, ETL (Extract, Transform, Load), Microsoft Office Suite, Google Suite, and Windows/MacOS Proficiency; Tableau, BigQuery, R, and Statistics Experience; Machine Learning Familiarity
**Soft Skills:** Critical Thinking, Leadership, Project Management, Public Speaking, Communication, Collaboration, Teamwork, Growth-Driven, Detail-Orientated, Adaptability, Organization, Self-Motivated, Curiosity, Enthusiasm, Integrity