I am a computer scientist and data scientist with over 20 years of experience in areas such as:

* algorithm design and implementation,
* analytics & data science, and
* data visualization.

I have worked on a variety of application domains including image compression, retail forecasting, retail banking, risk management, and most recently asset management.

I have coded applications in C++, Java, and R, but for most or my recent work I have used the Python ecosystem and SQL.

Through years of independent study, courses, and seminars I have learned and used most methods in the standard Machine Learning toolkit, e.g., regression, clustering, and tree-based methods such as Random Forests and Gradient Boosting.

In the past few years, I have also learned about the newer Deep Learning methods through online courses (Stanford, Coursera, EdX, Udemy, fast.ai) and independent practice.

Other topics I am actively exploring are: Hidden Markov Models, Causal Models and Machine learning for graph data. Here is a sample of some of the Data Science, Machine Learning or AI projects I have worked on.

* Personal projects
  + Predicting the number of jobs added in the US.
  + Analysis of voting data from the 2020 election, Georgia.
  + Analysis of Asset Manager holdings, using SEC 13-F filings.
* Part of online coursework:
  + Image recognition.
  + Search tree algorithm for games, Pacman.
  + Collaborative filtering for recommendations.
  + Matrix Factorization for recommendations.
* Consulting
  + Clustering survey responses to find “natural” groupings.
  + Survival Analysis for customer attrition.
  + Predicting failures in oil equipment.

Due to health issues starting in 2018 my career was sidetracked, hence the gap in my resume.

I am happy to say that I have rebounded. In 2021 I completed an online AI course from Stanford and organized an online seminar through Deeplearning.ai on “migrating to deep learning”.

I am now looking for a role where I can practice and continue to develop my skills in my core areas of computer science and data science and quantitative finance.

I would love to speak with someone about how I could contribute to your organization.

Best regards,

John Muller