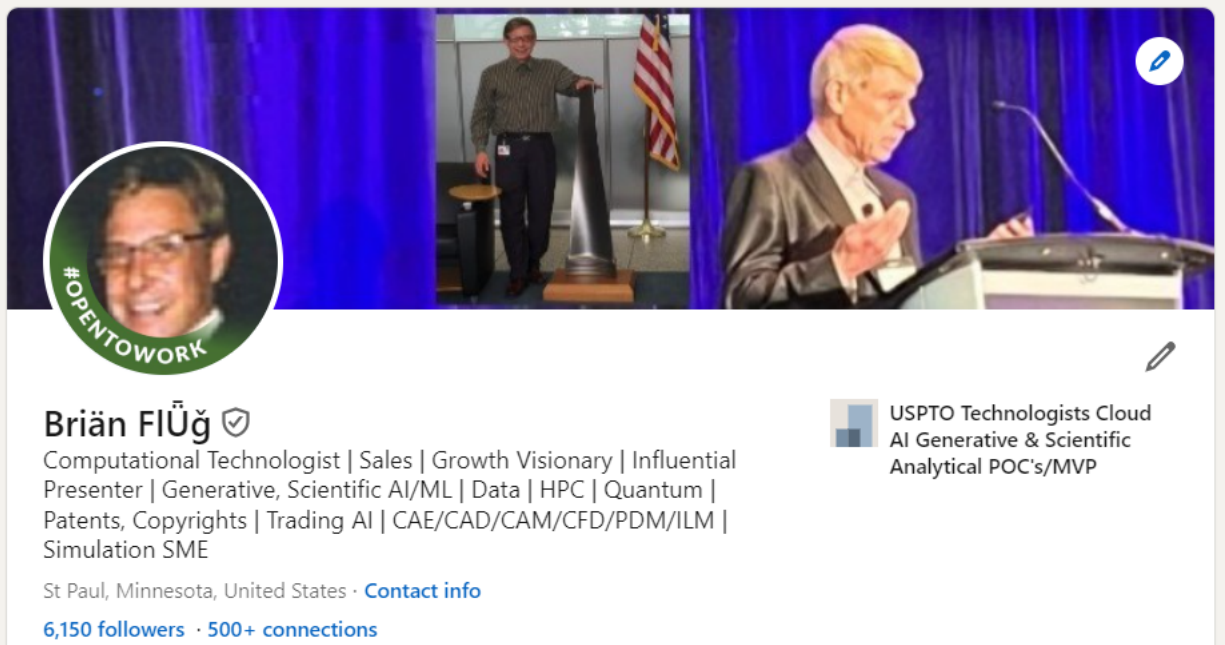


Brian Charles Flug 407-864-6468, bcfusamp@gmail.com  
LinkedIn Profile, <https://www.linkedin.com/in/goflight/>  
Feature Link <https://www.linkedin.com/in/goflight/details/featured/>  
CAE Simulation Portfolio <https://www.youtube.com/@goflight123>  
CAE Simulation Portfolio <https://www.youtube.com/@goflightijk>



## **CAREER SUMMARY;** **Brian Charles Flüß**

10+ Years Worldwide Pioneering / Selling Scientific Computational Analytical Engineering and Manufacturing Technology, CAE/CAD/CFD/CIM/PDM/ILM Simulation SME  
10+ Years Pioneering / Selling On-Premise / Cloud based Big Data, Life Sciences , AI / ML HPC Analytical, Simulation and Animation Computing  
10+ Years Selling, Developing, Migrating, Advancing and Deploying today's Cloud based AI / ML analytical computing

Expertise from Startups to multiple IPO's, strategic new solution, product and market visions, POC's/MVP's and deployment. to worldwide sales quota blowouts and partnerships, new market penetrations, venture capital investments and business solutions, patents, copyrights investment funding. Decades of successes, from a consultant, technical sales, direct sales, CTO, VP, management, director, solution architect and enterprise architect, development and management roles creating a motivation of attractions for successes. From new product development and new market penetrations, marketing and trade shows, direct and or channel partner sales and sales developments. Internal technical motivation and sales knowledge. Recent certifications from Google GCP Gen AI, ORA/Oracle, Snowflake and IBM, Solidworks and Autodesk

My career is 3 parts, part 1 ten years selling, pioneering the CAE/CAD/CAM/ILM/PLM technologies worldwide. Performing customer presentations, POC's custom AI developments. Part 2 was ten years selling and deployments in the data storage, cloud POC/MPV's in the HA AI Analytical scientific space. Part 3 most recent 10 plus years focusing on selling and deployment of cloud based AI Big Data, data, compute, generative and CAE simulation scientific analytics, cloud based computing.

With positions as an Engineer, Architect, Developer, Manager, Director, Sales, Business

Development, Program Manager, Sales Executive CTO. In the Life Sciences, Medical Devices, Health, Automotive, Aerospace, Agricultural, Defense, Government, Entertainment, Financial, Manufacturing, Transportation, Consumer Goods, Telco, Retail and Gaming industries.

## **PROFESSIONAL EXPERIENCE**

### **Technical USPTO Patent and Copyrights, part time Consultant**

Sept 2023 to Present

Developing copyrights trademarks and patents for any and every product imaginable, and even the ones not imagined USPTO, concepts to realities. SaaS Cloud AI Generative & Scientific Analytical POC's/MVP, trademarked. patented and deployed!

### **TEKsystems Global Services Aug 2022 Aug 2023**

#### **Solution Architect / Business Architect (Full Stack) AI / ML, Data Analytics, Data Science,**

Develop, Lead and facilitate business and technology customer / prospect sales workshops and deep dives.

Created and Drive to leverage standards, re-usable components, and design patterns and propose system solutions to meet business requirements focused in Data, Analytics AI / ML

Assess, design, and deliver, present architecture(s) that supports AI / ML, data in a high availability and scalability from a business deliverable and measurable outcome.

Drive innovation and high leading technology standards, balanced with business needs for sales growths.

Participate / Lead in the development of Data AI / ML / Iot focused tools, artifacts, customer internal videos briefings and training.

Advised and created leadership content and guidelines to allow agile corporate COE intelligence levels of decision making to meet/exceed goals.

Direct leadership for development and the execution delivery of technical sales content in the Data analytics AI / ML focus.

I was the lead architect for all CAD/CAE/Simulation customers, like Caterpillar, John Deere, Medtronic and Toro.

Establish, develop and maintain business relationships with current and prospective TGS customers.

Establish and grow partnerships, cloud provides and technology leading application company's. Execute defined sales strategy with a focus on net new business development.

Maintain up-to-date knowledge of the industry and competitive position of the company and participated in assessing customers and prospects technical business needs to architect a TGS technical sales solution offering

Consumed and managed multiple detail SOW's/RFP's

Updated TGS with today's cloud AI / ML providers directions and road maps

Obtained GCP Gen AI / ML, Snowflake and ORI certifications

Created and conducted multiple leading edge AI / ML technical white papers, technical briefings and presentations.

Exceeded sales quotas in excess of \$7m

### **Qubole (Idera) April 2021 July 2022**

#### **Solution Architect AI / ML Data Science Solution Architect**

Created and deliver highly-tailored product demo's which illustrate a deep understanding of the prospective customer's challenges and how our solution can solve the problem.

Execute defined sales strategy with a focus on net new business development.

Leadership with all CAE/CAD/CAM Simulation prospects in every vertical

Maintain up-to-date knowledge of the industry and competitive position of the company and conducted dozens of trade show presentations worldwide.

Worked with AWS and Presented on the Graviton 3, Outpost and EFA low carbon, high-performance computing

Researched and delivered an advisory product direction for the merger of the Idera and Qubole

analytical cloud-based solution.

Supported, guided and advised Quboles larger customer base with million dollar renewal business.

Advised leadership for Idera's business directions in the Big Data space partnership directions

Conducted multiple detail SOW's/RFP's resulting in artifact developments for sales business presentations

Conducted guided, industry focused solutions, and marketing webinars and trade show presentations for the Life Sciences Financial, DOE and Entrancement industries.

Created, delivered, presentations and demonstrations for trade shows and partner representative with AWS and others cloud partners

Trained personal on Big Data, technologies and sales qualifying

Exceeded sales quotas in excess of \$14m

### **Cognizant, Walt Disney, Florida October 2019 July 2020**

#### **Senior Manager, Big Data, AI Manager, Data Science**

Assessed and presented to C level management the current deployment and the formulated direction for cloud-based Big Data solutions at Disney Corporate.

Reported to the CTO on a bi- weekly on the status, progress and resources needs bi-weekly

Managed and consulted on best practices for a big data development and intellectual property view.

Manage and trained a staff of 25 technical engineers with Big Data Hadoop operations and development

Changed the Big Data cluster(s) from a 60% up time, to over a 99% up time.

Consolidated exponential cost savings with a reduction of 70% with deployments on new technology, like EMR, ETL, Snowflake, Spark, DataBricks, Qubole and others

Managed and educated a on and off shore personal group of 132 level 1,2,3 engineers.

Developed end engineered multiple Big Data deployment plans for Walt Disney

### **2nd Watch, Remote Office, contract, Life Sciences November 2018 November 2019**

#### **Senior Solution Architect, Big Data, AI / ML Data Science Lead**

With 2ndWatch, I was exclusively focused on a solution stack with intelligent automation integration for Big Data Analytic s, Simulation Data, HPC on the cloud. Working with customers moving to Big Data Analytic s on the cloud focused on future deliverable s and ROI's

Engineered and deployed multiple pre Sales POC's for HPC/ML/AI Cluster, Engineered, integrated and fully automated Big Data analytical data sciences on demand portals.

Created, integrated an intelligent set of Cloud artifacts, templates and protocols for use with all customers deployments of Big Data analytic s to the Clouds (Aws & Azure) from basic analytic s to advanced scientific HPC analytic 's

Consulted and Advised 2W on Big Data technical sales and marketing directions ans skill sets.

### **OnApproach LLC, startup, contract November 2017 November 2018**

#### **CTO, Credit Unions AI**

I exclusively lead the direction for Big Data Analytic s at OnApproach from industry and customers discoveries development and deployment to delivery of a automate interrelated (on demand) cloud-based high-performance collaborative analytical data lake for the over 720 credit unions across the USA. Changing the credit unions industries from a legacy 30-day analytical window to a real time analytical intelligence HPC data lake

Architect, integrated, developed and deployed a Computational Cloud HPC Credit Union Big Data Lake the next generation collaborative, intelligent analytical cloud framework.

Delivered a software development life cycle plans, to increase the performance and profit margins for the current OA product over 20-fold.

Changed the Credit Union digital reporting window from a 30-day report, benchmark to a daily, hourly and real time.

Conducted and delivered business discovery, architect and built, POCs / MVPs / Pre-Production Data Lakes for the Credit unions industry

Developed multiple legal abstracts for copyrights and patents for existing products and the

CASPIAN Data Lake, as well as trade show and marketing content with week knowledge transfer training briefings.

**TNT Technologies, Inc. Minneapolis MN, March 2014 October 2017**

**Senior Solution AI / Architect / Business Development : Big Data Architect / Director / Team Lead Contract Business Driven Technical Positions**

Vertiv, Big Data AI/ML SME

Siemens Energy, Iot Big Data AI/ML SME Turbine Blade Simulation AI

Level 3 Communications, Iot Big Data AI Manager

Be The Match (NIH), Life Science; Solution Architect Lead

Medtronic, Life Science Solution Architect Team / Pacemaker Simulation AI Lead SME

UHG, Express Scripts, ML SME, Solution Architect

Supervalu, Big Data Director

NaptiveX, ML/AI Solution Architect

Involta, Data Center Sales Engineer, Business CAE Simulation Engineer

**Caesars Entertainment Las Vegas NV September 2013 March 2014**

**Big Data Director**

Lead the Big data analytical business intelligence technology directions, from solution research to evaluations to proof of concepts and onto integrated operations and production ready steady states Research and deliver a long-term high-volume, real-time multimedia information streams for a future ultimate goal with Big Data automated intelligence corporate enterprise solution plan Responsible for assessing the business needs, designing, architecting and managing all of Caesars Entertainment Big Data computational needs for all properties. With, as is, on-premises and as to be a hybrid Cloud.

Changed the Hadoop BI SLA from less than 50% to over 99.9%

Accountable for evaluating and integrated Big Data technology and vendor offerings, building POCs and recommending Big Data technologies portfolios.

Managed, administered and developed two Hadoop (HA) production clusters greater than 500 TB is usable.

Supported a staff of script code developments for map R and EDW ETL solutions

**TNT Technologies, Inc. Minneapolis MN, NIH, multiple contracts September 2011**

**January 2013, AI, CAE/CAD/CAM Simulation SME**

Was the lead engineer with a Government grant to change the bone marrow leukemia successes stats by utilizing today's leading computational technologies.

Managed ongoing deliverables and cost resources to meet dates and technology requirements.

Leadership with GCP, AWS, Azure, SAVIS and other cloud based providers

Design, architect and validated the world's largest Big Data distributed parallelism high performance computational solution for the human genome project (bio informatics).

Researched, integrated, engineered and architected and developed a utility patent valued at over \$250M.

Performed CAE AI Simulations utilizing, ANSI, Solidworks, and Simula

Accountable and the up to date subject matter expert in the Big Data Analytical, business intelligence and high-performance computing industry

Provided accountability and leadership for transitions from proof of concepts to production

Created, developed and directed a medical distributed big data Hadoop and Cassandra Map

Reduce genome analysis HPC solution set for the Federal Human Genome Project

Lead programmer, architect and development manager that delivered multiple HPC scientific solution parsing and high-performance algorithm solutions sets.

**SEC / NSF, Washington November 2008 September 2011**

**Enterprise Director / Technologist**

Presented monthly to the Government CAB (change approval board) on ROI, change control and resource utilization's

Accountable for the architecture, integrated the development and implementation of a real time Big Data Fraud Analytical (streaming data) collaborative intelligent by-directional system for the Security Exchange Commission.

Assessed, researched multiple Governments agencies for a Cloud computer direction.

Direct accountability, leadership, developed, deployed and administered multiple Big Data initial Government initiative for the National Science Foundation, NSF, SEC, DOJ, USPTO

Direct accountability, leadership and recommendations for multiple Federal Government initial initiative for Big Data Analytics, on-premises and Cloud adapters.

Responsible for delivery of a big data parsing patent abstract search solution for the USPTO

Created, deployed and delivered multiple big data commodity coded map reduce algorithm solution sets

Conducted multiple Information technology steering committee briefings for executive Government officials and officers and various military leadership.

### **TNT/VMS, Inc., Independent multiple contracts October 2006 April 2008**

#### **Cabelas, IT Data Director / CAE Lead**

UNISYS/EMC, Solution Architect Lead

IBM/ING, Solution Architect Lead

### **Digitiliti Minneapolis MN July 2005 September 2006**

#### **Chief Architect**

Founder, architecture, developing, integration, deployment and management of a private BaaS (backup / recover as a service) private telco Cloud technology service offering.

Architected, programmed and deployed a cloud technology enterprise solution for high availability, data protection and disaster recovery mission critical computing services.

Developed and executed the business plan that took Digitiliti to IPO status in 2004.

### **Historic Employment**

Storage Sales Architect, Seagate Corporation, Minnesota, (6/2002 to 10/2003)

Senior Storage Sales, Backup SME, Veritas Corporation, Minnesota, (6/2000 to 6/2001)

Corporate Investment Technologist, WAMNET, Minneapolis, Minnesota, (6/1996 to 6/2000)

Worldwide Technical Pre / Post Sales Manager, CAMAX, Minnesota, (May 1988 to 6/1996)

Worldwide System Engineer, Computervision, Minnesota, (6/1983 to 6/1988)

Nuclear Analytical Engineer, GCA / PAR Systems, Minnesota, (1977-1983)

### **Significant Achievements**

Direct technical accountability for \$7m in sales in 2023, \$14m in 2022

Built multiple POC/MVP's for the 911 Emergency real time AI / Analytics for the City of Denver and Chicago

Obtained over 75 Certifications Career to date!

Maintained a home HPC Simulation CFD Lab on Cray Computers

Directed and lead 3 different start ups that either was sold or Ipo'ed

Developed and conducted many Big Data Hadoop Distributed Processing business objectives from a financial feature function return on investment portfolio

Architected and deployed POC's / MVP's for multiple Big data AI / ML Iot on demand utility computational enterprises, John Deer, Siemens, Medtronic

Development and proof of concept for the world's largest big data distributed parallelism computational solution for the human genome projects, with Hadoop, MR, Cassandra, IBM and other technologies.

Migrated, improved performance with reducing costs over dozens of companies to the Cloud.

Accountable for the development and implementation of a real time big data (streaming data) collaborative intelligent by-directional trading pattern and financial analysis system for the SEC, using Hadoop, MapR, Big Table, Cassandra and IBM technologies

Over a decade of world-wide deployment of pioneering leading-edge Big Data, HPC, Cloud computational analytical technology advancing a corporate technical sales model from \$3m to

\$75m in sales.

Changed the ROI from red to black for many early Hadoop adapters.

Evaluated, developed and deployed a medical radiology collaborative real time cloud for a nationwide radiologist real time diagnostics solution.

Advised, enhanced, developed, and deployed Spark in dozens of Hadoop Big Data analytical deployment.

Engineering and programmed a big data distributed MR rendering farm for the entertainment industry, Pixar and Sony utilizing technology from Cray Research, SGI distributed big data file systems and IBM global parallel file systems technologies.

Acting CTO for a start up (WAMNET) obtaining over \$700m to build, develop and deploy private HPC clouds for the medical, entertainment and print pre-press industries, prior to today's big 3 Cloud providers.

Responsible for the development and deployment for a 100% digital information (big data) computing solutions for a Boeing 7xx series airplane.

Responsible for delivery of a big data Hadoop Cassandra parsing (MR) patent abstract search solution for the USPTO

Consulted and engineered a next generation security model. A level 5, physically impossible to breach, very little to no computational resources needs with MIT, NIST, GDPR and double concurrent tunnels, Walled Gardens

Engineered, architected and developed a utility patent valued at over \$250M.

Programmed a high-performance map reduce solution set for the processing of multiple computational fluid dynamics analysis, CFD Simulation Wizard

Over a decade of world-wide deployment of pioneering leading-edge CAE/CAD/CAM/CAM technology advancing a corporate technical sales model from 3m to 75m in sales.

Engineered and developed the worlds largest computational utility simulation data center

Developed and obtained a copyright for a software package for an intelligent relational product data bases management solution, PDM/PLM/ILM

Programmed a series of map reduced parings coed sets to allow the analysis of large (big data) data files for the computer aided engineering and fluid dynamics analysis.

Achieved over 43 years of continual investments in a never ending and always growing knowledge, abilities and successes leading the digital frontier, over the decades.

With decades as a leader with technology allowing the advancements and engineering of products like a pacemakers, CAD/CAE/CAM. On to The utilization of this device capturing data and intelligence from this device. To the changing of the pacemaker (device) from reactive to proactive with a real time medical collaborative cloud enterprise.

## **EDUCATION**

University of Minnesota, Minnesota

University of London, UK

Bachelor of Science, Computer Science, Manufacturing Engineering

Lakewood Community College, Minnesota

1 Year College Certification, C Programming

Saint Paul TVI, Minnesota, 1 Year Certification, MIS Management

University of Texas (online)

## **TECHNICAL SKILLS (Not Complete List)**

12 Years Worldwide Scientific Computational Analytical Engineering Technology Pioneering, 1985 to 1997

12 Years Pioneering On-Premise / Cloud based Big Data, AI / ML analytical Computing, 1997 to 2009

14 Years Migrating, Advancing and Deploying today's Cloud based AI / ML analytical computing, 2009 to today 2023

From Cloud POC, Cradle to today, over 14+ years Cloud expertise

Dozens of Certifications, Networking, Fiber Channel networks, AI/ML, Cloud, Big Data, Google, Oracle and IBM active certifications

Operating Systems 37 years

AIX, IRIX, HP-UX, Solaris, CentOS, Linux, Red Hat all Unix based operating systems and kernels, Windows, VM, Chapel, CMOS, VMS, iOS

Programming Languages 37 years, DEB/FEM wizard for over 25 years

Pascal, Fortran, C++, Java, HTML, XML, Eclipse, IntelliJ, JSON, APIs, REST, Python, RPG, Basic, Scala, Pine

Computational Technologies, AWS Big Data AI/ML/HPC Stack, Azure Big Data AI/ML/HPC Stack, EMR, intelligent dynamics HPC scalability, intelligent and automated Hadoop ECO systems, Apache, AWS Big Data AI/ML/HPC Stack, Azure Big Data AI/ML/HPC Stack, GCP Big Data AI/ML/HPC Stack, ORC Big Data AI/ML/HPC Stack, IBM Big Data AI/ML/HPC Stack, Cloudera/Hortonworks, BigInsights, Talend, Oracle, IBM,

Talend, Terraform, MuleSoft, Pentaho, Ganglia, Spark, Scala, Python, .Net, Java, JVM, Container Intelligence Coding, ETL, Storage / Databases, SQL, Oracle, DB2, Informix, Postgres, MongoDB, Dynamo, HBASE, Cassandra, NoSQL, Mark Logix. Analytic s / R code, Cognos, Power BI, SAS, Apache, ANSI, SAP, Tableau, Tibico, Datameer, Redshift, Glue, Cloud9, Kinesis , Kubernetes Kafka, Talend, Jenkins, .Git, SVC, Cloud 9, most Big Data technologies available today and tomorrow. Virtualization / Cloud, Virtual Machine, Virtual Box, Citrix, Blue Mix, Savvis CenturyLink. Quantum computing, qbit and circuit intelligence, Simula, Cosmos, MoldFlow, ANSI simulation expertise Applications Disciplines, not complete, PTC, Autodesk, Simula, UG2, High Performance Computing, Cloud computing and Intelligence, Iot, Scientific Engineering, Data Intelligence, Enterprise Modeling, ESB, EA, Artificial intelligence, Machine Learning, Adaptive intelligence, research, development, operations, productions, security, storage and backup, entertainment rendering, simulation and molding, data intelligence, big data, warehousing, data intelligence and commodity consumption and security, I/O Path Reduce Deployments, IBM GPFS, EDW, Mining and Analysis, DM, Information Life Cycle Management, BI / BA, Data Intelligence, remediation, dynamic offloading, low voltage computing, Nuclear Analysis, Tel-co Intelligence, DevOps, HDFS, GPFS, Zeph, Luster, Gluster, MPI, WSO2, ESB, Shell, Pearl, PHP, Java, SDLC, Spring, Git, RDBMS, Java/J2EE, Linux, Python, C, C++, Hadoop, Hive, Sqoop, HBase, Pig, Map Reduce , Spark, Scala, Storm, Slurm, Rock clusters, R code, MongoDB & other Hadoop Eco-system components, BI / BA / SA and ETL tools and frameworks, Rendering and Radiology MDI, Terraform, Pentaho, PLM/PDM and SDLM intelligence and expertise.