Chris Labbe

Denver Area, Colorado, USA (720) 864-1012 <u>chris@sunshinelobby.com</u>

HIGH-TECH MANAGER & VISIONARY LEADER with experience in world-wide technology development, manufacturing engineering & personnel management.

Key skills

- Global Organizational Management & Strategic Planning
- Factory & Equipment optimization through statistical analysis
- Project Management & Decision Making
- · Design Engineering & Product Launch to Manufacturing
- Python Machine Learning
- Tensorflow, OpenCV, Dash, SQL
- Data Science algorithms -- KNN, regression, reinforcement
- · Lifelong Learner passionate about using data to make processes work better

Sundance Energy, Denver, CO

Jan 2020 to May 2021

Sr. Data Scientist

- All work developed and published through AWS
 - Lambda (Python serverless scripting)
 - S3, Timestream & Postresql for data storage
 - Sagemaker for ML & Tensorflow
 - Elastic Beanstalk to produce interactive dashboards
 - IoT Core to collect field data from deployed sensors
- Many Lambda for data from APIs to AWS PGSQL & S3
- Developed failure prediction ML models using seasonality regression
- Developed analysis & alerting for downhole cards (data from pump activity)
 - Raw data analyzed by unique math concepts
 - Images tagged and identified using OpenCV / Tensorflow
 - Results presented daily in web dashboard on AWS Elastic Beanstalk
 - Alerting & recommendations managed through AWS SMS & SNS

- Identified & implemented sensor strategy for power usage in pump motors
 - Voltage & current sensors on industrial 480V equipment
 - Aggregated and back-hauled to AWS IoT Core via MQTT
 - Data in Amazon S3 & Timestream. Tensorflow work in Sagemaker
 - Voltage and current behavior predictions using Tensorflow2
- Automated ingestion and analysis of NYMEX data
 - Daily for hundreds of commodities presented on Spotfire dashboard
 - Near real time & 15 minute versions demonstrated
 - Commodity pricing projection system implemented
- Started work on analyzing errors in flow prediction vs real performance
 - Q: Equipment as cause for output curves to change from projections?
 - Q: Can reservoir information be tied in better?
 - Was working these with basic multivariate linear regression
- Other key projects
 - Investigating AR for accelerating field adjustments & repairs
 - Automation of electronic valves to reduce field visits
 - Scrape PDFs from TX RRC & suppliers to reduce labor needs
 - OCR for scanning sales tickets using SimpleHTR (Tensorflow)
 - Investigate options for automated compliance filings based on data

Seagate Technologies, Longmont, CO

April 2002 to September 2018

Operations Technology Advanced Analytics Group

Managing Technologist Data Science

2015 to 2018

- Built Seagate Division dedicated to Data Science
- Responsible for recruiting, hiring & managing the Data Scientists
- Developed systems to facilitate multi-variate factory controls
- Worked with failure-automation team to rebuild decision processes
- Solved problems in factory floor using smart vision detection
- Pioneered use of predictive health for production equipment (PHM)
- Developed true data solutions for business teams stuck in weak processes

Analysis & Solutions Engineering, Sr. Director

Thailand 2011 to 2013, China 2013 - 2015

- Asia-wide leader for Customer & Reliability Product Failure Analysis
- 350 employees in Singapore, Malaysia, Korea, Thailand & China
- Focused teams on strategic goals, common practices & communications
- Automated electrical FA with random forest machine learning
- Optimized testing systems resulting in reduced \$Millions in capital needs
- Reduced quality alert time from 7 days to under 1 day
- Global champion for Seagate's development of an 8D culture

Product Systems Engineering

2007 to 2011

- Member of Core Team for successful launch of 3.5" disc drives
- Coordinate the combined FW output from 5 different functional teams
- Design test processes that attack key reliability failure modes
- Schedule, manage & track a constant list of ~80 issues & features
- Developed a centralized interface for collaboration of key issues (Python)

Systems Design Technologist

2005 to 2007

- Advanced Technology planning and staging
- World-wide Platform Lead
- Direct management of key capital reduction projects
- Direct author of software tool 95% reduction in configuration build failures

Director of Test Process Engineering

2004 to 2005

- 2nd level manager for Manufacturing Test Firmware team
- 2nd level manager for Manufacturing Projects team

Senior Staff Engineer, Release Products Team

2003 to 2004

• Responsible for WW coordination of R&D to solve field quality problems

University of Colorado, MS Data Science (in progress)	ECD 2022
4th Brain Machine Learning Engineering program	ECD Nov '21
Tensorflow2 Certification	2021
Machine Learning by Andrew Ng	2016
Johns Hopkins Data Science	2016
Harvard University, Director's Certification	2007
Kepner-Tregoe Problem Solving & Decision Making	2005
Six Sigma Brown Belt, Seagate	2008
University of Colorado, MS Computer Engineering (Degree not completed)	1998
DeVry University, BS Electrical Engineering	1995
Magna Cum Laude Graduate (4.0/4.0)	

- Co-founder Periodic Brewing
- Co-founder Frankenchiller Brewing Solutions
- Completed > 20 marathons & ultra-marathons
- Served on Colorado Brewer's Guild Board of Directors
- 7 years on Board of Directors for Twin Peaks Charter Academy
- Founding member and committee chair for TPCA High School
- 2 formalized patents + several in process & many trade secrets awarded