

MARK T GINGRASS

405-589-9619 | mark.gingrass@gmail.com | github.com/mtgingrass | linkedin.com/in/markgingrass/ | markgingrass.com

SKILLS

- Autonomous Vehicles
- Object Detection
- Machine Learning, Neural Networks
- TensorFlow, Keras
- Computer Vision, OpenCV
- Python, Conda, Jupyter, PyCharm
- C/C++, Visual Studio, XCode
- GitHub;
- Linux, Bash; OSX, Windows
- HTML, Mark Down, LaTeX, Atom

ENG/CS/MATH

- Calculus I, II, III, Differential Eq., Linear Algebra
- Circuits I, II, Digital Systems
- Unix OS;
- C++, Advanced C++
- Machine Learning, Data Mining
- Linear Optimization
- Information Tech & Operations Mngmt.
- Modern Physics, Eng. Physics I, II
- Technical Writin
- Arena Simulation Modeling

EDUCATION

MBA - 07/2016

Oklahoma City University.

B.S. - Aviation

Management -

05/2013

Southeastern

Oklahoma State.

Squadron Officer

School (SOS) - 06/2013

Air University Maxwell AFB, AL

A.S. Pre-Engineering

05/2010

Oklahoma City

Community College

Lean and Green

Practitioner 04/2013

The University of Oklahoma

OBJECTIVE STATEMENT

With team leadership and project/program management skills, seven years' experience in automated electronics equipment along with C++, R, and Python experience, I have much to offer. I'm passionate about self-driving cars and Machine Learning industry. Currently learning Self-Driving Car Engineering and Advanced Data Analytics.

PROJECTS

- Traffic Sign Classification
 - Utilized TensorFlow framework and OpenCV in Python to train a classifier for the GTSRB traffic sign dataset.
- [Auto-detect & Mark Road Lanes](#) using Python & OpenCV (Udacity SDC Nano-degree).
 - Created pipeline for image processing for detecting, and marking highway lanes in images and videos.
- [Created R script to manipulate Solar Radiation Data](#) through data pipelines.
 - Piped data through various Shallow and Deep Learning Algorithms to achieve 88% accuracy.
- [Text mine & NLP analysis using R](#) & Twitter API then auto-published to WordPress site using API.
 - Scrapped Twitter, created Word Cloud, then auto-published to WordPress site all with R scrips.

WORK EXPERIENCE

Operations Researcher: Data Science & Analytics. Tinker AFB, Oklahoma City, OK 73145. 08/2015 - Present

- Create data pipelines; ingest, clean, feature extraction, modeling, statistical validation, & visualization / reporting (R, Python, Excel), sources: ODBC, csv, Access, Excel, Business Objects (SAP) & legacy systems.
- Created tool to isolate & calculate surge costs of mass redistribution of assets, accounting for lateral, repair & contract support; 11K parts at \$320M. (EXPRESS, D200A/F, SBSS) – Ultimately Briefed to Pentagon
- Used statistical analysis to determine sampling sizes for Wing Quality Assurance program.
- Completed Army Logistics University's OR/Systems Analysis for Military Applications Course 1/17 - 4/17.
- Model complex problems, bring insights and identify patterns in data through statistical analysis, data mining, machine learning techniques and visualizations.
- Crated framework for automatic extraction, manipulation, scoring, & cleaning data from multiple sources; fault tolerant and dynamic programming structure to customize needs.

C++ Programming Instructor: Metro Technology Centers. Oklahoma City, OK 7311. 05/2015 – 11/2017

- Taught Data Types, Control Structures, Functions, Arrays, Object Oriented Programming (OOP), Pointers, Memory Allocation, Classes, Operator Overloading & Standard Template Library.
- Used Microsoft Visual Studio, Dev C++, Cloud Compilers & Eclipse.

Logistics Management/Demand Forecaster: Tinker AFB, Oklahoma City, OK 73145. 12/2010 – 08/2015

- Created Decision-Making Analysis Tool to automate supply forecasts.
- Partnered with Foreign Militaries to establish programmed repair quantities for the Global Repair Contract - alleviating Temp Work Requests (T-Jobs) for 200+ parts & prevented component shortages.
- Collaborated with CMXG to maintain repairs on CENC & AIVs despite 50% capacity - maintained repair rate for 11 months preventing precipitous drops. Coordinated overtime to maintain production levels.
- Lateral support and engineering changes to Technical Orders allowed inspect/re-use saving over \$2M/year (material & labor costs) – eliminating production halt.
- Collaborated with DLA & OEM for emergency buy and accelerated delivery rate, circumventing 210 day ALT/PLT for 811 parts (\$1.7M) - authorized lateral support eliminating 7 month support gap.
- Managed organic and contract repairs for 1,500+ Pratt & Whitney F-100 Engines & maintained multiple configurations of War Readiness Engines (WRE) at optimum levels.
- Quality Assurance / Auditor for 110 employees; reported direct to Wing Executives.
- Develop phased procurement & replacement schedules based on programming plans and schedule.

Senior Electronics Tech / Avionics Test Station Technician: Ellsworth / Tinker. 12/2002 - 12/2010

- Managed Product Quality Deficiencies for 78 personnel; recovered cost and prevented recurrences.
- Authored 16 Technical Order (TO) improvements published for the Air Force.
- Repaired avionics for 80 B1-B aircraft; supported operations in two combat theaters simultaneously.