


# J. Alexander Batista

 alexander.batista@knights.ucf.edu

 407-494-3574

 [linkedin.com/in/jabatista](https://www.linkedin.com/in/jabatista)

 <https://www.icarus-analytica.com/>

## Summary

As a former clinician and naval officer, I am passionate about precision, attention to detail, and team building. Through the development of agile tools, statistical analysis, and data visualization, my work and leadership streamline the process of turning raw data into real-world solutions for complex problems in a transparent, easy to understand process.

My most recent projects involve ensuring healthcare regulatory guidelines are met through the creation and deployment of automated auditing tools; clinical quality assurance through root cause analysis of complex problems including but not limited to infection rates, hospital readmission, and supply chain; process improvement of overall operational workflows through mapping of organizational networks that identify problematic communities; analyzing stock market data for private investors; web scraping and automation of inventory management and order processing for online retailers; database schema creation and implementation of warehousing/transactional systems; uni-directional and bi-directional system integrations (i.e. SAP Fieldglass/Workday/ServiceNow); financial forecast models; DevOps alerts.

See more on my site: <https://icarus-analytica.com/>

## Experience



### Senior Data Architect

Siemens

Mar 2021 - Present (2 years 3 months)



### Freelance Data Scientist

Upwork

Jan 2021 - Present (2 years 5 months)

# EXTRACT, TRANSFORM, AND LOAD (ETL )

> Extract data from various APIs and/or FTP servers to conduct statistical analysis to the specifications of various clients. Some of the types of analyses conducted are, but not limited to: ad campaigns, stock market, retail, and healthcare.

> Utilized OCR technology to scrape data from scanned images and pdf documents.

> Transform data collected from various sources in order to meet requirements of current data structures employed by the client.

> Load data into SQL servers or other platforms such as Shopify



### Clinical Data Analyst

AdventHealth

Jul 2019 - Mar 2021 (1 year 9 months)

# EXTRACT, TRANSFORM, AND LOAD (ETL )

> Utilize SAP business object platform to query and extract existing data.

- > Compile raw data files from existing SQL servers, administrative staff, and government provided open data sources using Python
- > Manipulate raw data utilizing Pandas/Dask Python packages to meet existing data structures for migration or new business intelligence projects.
- > Push "clean" data into existing/new SQL databases, or compiled analytical reports for assisting industry leaders in data-driven decision making.

#### # STRUCTURED QUERY LANGUAGE (SQL)

- > Design and create normalized database schemas that reduce data redundancy, storage costs, and enable highly customizable and granular reports.
- > Create and execute complex queries to compile specific data points requested by stakeholders and other business/clinical intelligence analysts.
- > Review existing database structure to optimize performance, reduce costs, and suggest improvements to nomenclature.

#### # AUTOMATION & ANALYTICS

- > Conduct hypothesis testing to infer changes in operations and identify potential business development opportunities.
- > Meet with subject matter experts and leaders to understand and develop Machine Learning algorithms that prescribe and predict desired business intelligence.
- > Develop scripts, reports, and dashboards that compile pertinent day-to-day information to guide operations in a structured and systematic way.
- > Review existing processes to identify redundancies and opportunities for integration with other existing technologies or projects.

### **Lead Business Consultant**

#### **B & R STAFFING GROUP, LLC**

Apr 2018 - Aug 2020 (2 years 5 months)

#### # ADMINISTRATIVE

- > Develop comprehensive business plans.
- > Write policies and procedures that align with high quality practices, ethics, and desired business culture.
- > Coordinate meetings with clients to understand their business needs and negotiate contracts.
- > Manage internal staff and external partners to meet established deadlines and stay on budget.

#### # EXTRACT, TRANSFORM, AND LOAD (ETL )

- > Tap into open-source government databases to extract data points of interest.
- > Convert raw data into useful structured components for business intelligence.
- > Save pertinent structured data to business SQL servers for analysis.

#### # STRUCTURED QUERY LANGUAGE (SQL)

- > Design and create transactional databases for day-to-day business operations.
- > Design and create data warehouses to store historical business data for future analysis.
- > Create and execute complex queries to compile specific data points requested by investors and other stakeholders.

#### # ANALYTICS

- > Market research of existing businesses and opportunities for industry penetration.

> Analyze business operations to guide push metrics and meet goals.



## **Critical Care RN**

Florida Hospital Fish Memorial

Apr 2018 - Jul 2019 (1 year 4 months)

# CLINICIAN

- > Hourly assessment and documentation of critically ill patients.
- > Management and care of Intra-Aortic Balloon pump, Continuous Renal Replacement Therapy (CRRT), Mechanically-Ventilated, and non-invasive ventilated (BiPAP, CPAP) patients.
- > Titrated life-sustaining medications to maintain hemostasis to include, but not limited to: vasopressors, vasodilators, anti-dysrhythmic, anti-coagulants, paralytics, and sedatives.
- > Served as a resource for vascular access in complex patients.

# EDUCATOR

- > Provided training on ultrasound-guided vascular access to all Nursing, Respiratory Therapy, and Phlebotomy staff.
- > Developed educational programs, and policies/procedures to implement new clinical processes or modify existing clinical practice.



## **Lead Compliance Consultant**

Interventional Cardiology & Vascular Consultants

May 2018 - Jan 2019 (9 months)

# ADMINISTRATOR

- > Responsible for hiring and training qualified staff to service the cath. lab and recovery area.
- > Purchase supplies, coordinate biomedical waste, medical laundering, and terminal cleaning services for the facility.
- > Schedule staff for lab's daily operations.
- > Maintain facility compliant with governing body (COLA and the Department of Health) regulations for Clinical Laboratory and Officer Surgery Center with level 2 anesthesia.



## **Lead Business Consultant**

More Life Home Care

Dec 2017 - Oct 2018 (11 months)

# CONSULTANT

- > Develop policies and procedures for everyday business operations.
- > Ensure business compliance with Federal, State, and local government laws.
- > Update business practices according to changes in AHCA regulations.
- > Plan and coordinate business strategies for client and partnership acquisitions.



## **Naval Nurse Corps Officer**

US Navy

Nov 2013 - Feb 2018 (4 years 4 months)

# HOSPITAL INITIATIVES

- > Developed, implemented, and maintained a people management system that reduced costs and improved staff recall from <40% to >90% within 6 months post go-live.

- > Collaborated in data gathering and analysis for the hospital-wide execution of Vocera, a clinical communication tool.
- > Participated in clinical data analysis and development of the Catheter-associated Urinary Tract Infections (CAUTI) and Central Line-associated Blood Stream Infections (CLABSI) initiatives.

#### # CHARGE NURSE

- > Responsible for patient admission/discharges, room coordination, and staff management.
- > Managed occupational safety training for over 80 employees.
- > Conducted quarterly safety inspections and reports of nursing ward and patient rooms.
- > Coordinated multi-disciplinary meetings to plan patient care and discharge.

#### # CLINICIAN

- > Provided MEDEVAC in-route and inpatient care to more than 300 wounded warriors sustaining polytrauma from overseas deployment.
- > Calculated and titrated more than 150 Heparin drips based on aPTT levels.
- > Conducted and monitored surveillance cultures to assess for Multi-Drug Resistant Organisms (MDROs) on all patients arriving from overseas.
- > Performed wound/ostomy care, CBI, TPN infusions, blood transfusions, antibiotic infusions, nasal-gastric tube (NGT) insertion, and foley/coude catheter insertion for more than 800 hospitalized patients.
- > Managed chronic illnesses and total joint replacement care of military service members and their families.

#### # VASCULAR ACCESS EXPERTISE

- > Participated in vascular access process improvement initiatives to reduce phlebitis, infection, and deep vein thrombosis.
- > Served as a consultant for over 1500 patients with complex vascular access needs.

#### # EDUCATOR

- > Precepted corpsmen, medics, LPN students, naval academy nursing students, and newly hired nursing employees.
- > Instructed the blood administration, continuous bladder irrigation (CBI), 12-lead EKG, and ultrasound-guided vascular access classes.

## Education



### University of Central Florida

Master of Science in Data Analytics, Data Science  
2020 - 2022



### Florida Southern College

Bachelor of Science - BS, Registered Nursing/Registered Nurse  
2012 - 2015



### University of Michigan

Python, Software Development  
2019 - 2020

## Licenses & Certifications



### **Biomedical Research - Basic/Refresher - CITI Program**

Issued Sep 2014 - Expires Sep 2017

13844821



### **Students and Instructors - CITI Program**

13947395



### **Conflicts of Interest - CITI Program**

Issued Sep 2014 - Expires Sep 2018

13947396



### **Nursing / HSC / ATP GCP - CITI Program**

Issued Sep 2014 - Expires Sep 2017

13947397



### **Introduction to Biosafety - CITI Program**

Issued Sep 2014 - Expires Sep 2015

13947398

## Skills

Amazon Web Services (AWS) • Apache Airflow • Google Cloud Platform (GCP) • Data Analyst • Python (Programming Language) • Healthcare Consulting • Clinical Research • Healthcare Management • Database Design • SQL

## Honors & Awards



### **Service Excellence Award - SIEMENS**

Feb 2022



### **Best Tech. With A Purpose - SIEMENS**

Oct 2022