Data Scientist/Developer
Matthew Wilchek

- ✓ Current Federal Employee (GS-11)
- ✓ Active TS/SCI-Poly Clearance
- ✓ Polygraph tested October 2017 - no deception detected

CONTACT

Sterling, VA. 20164

mwilchek@gmu.edu

https://mwilchek.github.io/

860-944-8795

LANGUAGES

Python/R

Java/SQL

HTML/CSS

SKILLS

ArcGIS

Data Science

Data Architecture Design

UX Design

Microsoft SharePoint Designer

Adobe Photoshop/Captivate

HOBBIES

Mobile Technology Development
Computer Gaming
Penetration Testing
Traveling

PERSONAL PROFILE

I am a well-rounded solutions architect with 6+ years of experience in data science and data analysis. I always continue to learn technical and non-technical skills such as programming, GIS mapping, international relations and project management. I consider myself to be highly proactive, looked as a technical expert, and comfortable leading projects for a large group of stakeholders.

ACHIEVEMENTS

2012: Design and develop a Project Management Portal on Microsoft SharePoint for the National Oceanic and Atmospheric Administration (NOAA)

2013: Assist in a big data assessment of financial intelligence and open-source intelligence for inside-trading investigations for the Securities Exchange Commission (SEC)

2014: Contribute to the design and technical development for the re-branding of the Financial Crimes Enforcement Network (FinCEN) on their public website

2016: Lead the development and design of Geo-spatial Intelligence (GIS) mapping products for international agricultural trade analysis for U.S. Department of Agriculture's Foreign Agricultural Service

EDUCATION/PROFESSIONAL TRAINING

2017-Present: George Washington University Master of Science in Data Science (current graduate student)
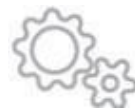
2014-2017: Northern Virginia Community College Associates in Computer Science (graduated with Cum Laude Honors)

2008-2012: George Mason University Bachelor of Arts in Global Affairs (graduated with Cum Laude Honors)

2016: Project Management Professional (PMP) Certification training

2016: Geo-spatial Intelligence development and analysis training by the National Geo-Spatial Intelligence Agency (NGA) and Esri

WORK EXPERIENCE

11/2017 – Present: Data Scientist (GS-11)
DHS – Immigrations Customs Enforcement (ICE)

- Lead and drive a 11 contractor personnel team in complex data modeling, mining, visualization and other related data science initiatives
- Support development of advance web-based business intelligence dashboards, ETL processing scripts, and database management scripts using python, R, SQL, and Tableau
- Facilitate data science methodology training and experimentation with new supervised and un-supervised machine learning algorithms (tensorflow, keras, Scikit-learn)
- Coordinate current and future computing resources for the team including internal RHEL web server management, high performance computing clusters, and Oracle Business Intelligence Suite Enterprise Edition (OBIEE) interfacing to data warehouses

11/2016 – 11/2017: Geographer (GS-11)
U.S. Census Bureau – Geography Division

- Developed programs in Python to ingest and analyze large geo-spatial data sets
- Performed exploratory data analysis (EDA) with R statistical computing and SQL
- Assisted the Hidden Unit Task Force with the identification of hidden housing units for 2020 enumeration by utilizing near- infrared (NIR) imagery and Light Detection and Ranging (LiDAR) imagery, and ArcGIS Python Arcpy scripting
- Queried and updated the Master Address File/Topologically Integrated Geographic Encoding and Referencing (MAF/TIGER) database and the Geographic Acquis-based Topological Real-time Editing System (GATRES)

10/2015-11/2016: International Program Specialist (GS-7)
USDA Foreign Agriculture Service (FAS)

- Acted as the primary technology liaison/business analyst for the Disaster Assistance division's Office of the Director
- Designed and executed analytical reports from various databases of global agricultural data to be integrated to a Geographic Information System (GIS), including big data sets, using various programming languages such as Java, JavaScript, HTML, and QML
- Developed and co-author GIS Story Maps used for executive management and Congress
- Assisted in a streamlined data integration of the USDA FAS's Grantor management system and FAS's SharePoint workspace to allow the flexibility of big data tracking, analytics, and enterprise searching

02/2015-10/2015: Competitive Intelligence Analyst
02/2014-02/2015: Web Developer (Contr.)
05/2012-02/2014: Financial Crimes Support Analyst
Northrop Grumman

- Supported the international business development team in providing competitive and market intelligence that influenced strategies to support business winning goals of the Air and Missile Defense division
- Design and implement content updates such as guidance and advisories to financial institutions on FinCEN.gov, 314a Financial Regulators web site, and the FinCEN Registered User Portal used by all domestic law enforcement agencies
- Assisted Senior Solution Architects with the development of open-source intelligence (OSINT) analytical software by performing operational research, planning analysis, and financial intelligence (FININT) analysis such as predictive analytics
- Lead the design and development of a Project Management Portal that followed a standardized project management framework based from the Project Management Institute (PMI) on Microsoft SharePoint for the National Oceanic and Atmospheric Administration (NOAA)

05/2011-05/2012: Intelligence Analyst Intern (Unpaid)
Financial Crimes Enforcement Network – Intelligence Division

- Researched, analyzed, collected and produced financial intelligence data and reports using various data collecting systems such as TECS, Lexis-Nexus, and SAS
- Studied trends and patterns, assisted in identifying intelligence gaps on global financial transactions activities in support of the prevention of financial crimes with senior intelligence analysts; including krypto-currency trends such as bitcoin
- Wrote over 20 investigative reports on foreign politically exposed people suspected of money laundering or terrorist financing by analyzing BSA data