



Analyst/Solutions Architect

Matthew Wilchek

- ✓ Current Federal Employee (GS-11)
- ✓ Active Secret Clearance
- ✓ Polygraph tested October 2014 - no deception detected by USSS

CONTACT



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LANGUAGES

Java

Python/R

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 5+ years of experience in data analysis and innovation design. 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 Ag Service



EDUCATION/PROFESSIONAL TRAINING

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

2014-2017: Northern Virginia Community College Associates in Computer Science

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

2017: George Washington University Master of Science in Data Science (current graduate student)





WORK EXPERIENCE

11/2016 – Present: Geographer (GS-11)

U.S. Census Bureau – Geography Division

- Support a research and development branch with updating and innovating Big Data, while improving data visualization methodologies
- Develop programs in Java and Python to ingest and analyze large geo-spatial data sets from Oracle databases
- Perform exploratory spatial data analysis (ESDA) using R statistical programming, SQL, and ETL
- Assist 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
- Query and update 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)

- Act as the primary technology liaison/business analyst for the Disaster Assistance division's Office of the Director
- Streamline and innovate metadata standards, templates, forms, agency data calls, and various processes using a variety of technology such as Microsoft Access, InfoPath, SharePoint Surveys
- Design and execute 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
- Develop and co-author [GIS Story Maps](#) used for executive management and Congress
- Assist 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 (\$60k)

Northrop Grumman – Air and Missile Defense

- 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
- Data collected, analyzed, and assessed multiple strategic Missile Defense technologies using Open Source Intelligence trade-crafts from numerous companies including cyber security tools
- Attended multiple symposiums and workshops to collect competitive Human Intelligence for strategic captures and lead counter-intelligence initiatives





WORK EXPERIENCE (Cont.)

02/2014-02/2015: Web Developer (Contr.) (\$55k) Financial Crimes Enforcement Network – Technology 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
- Contribute to the design and technical development for the re-branding of the Financial Crimes Enforcement Network (FinCEN) [logo](#)
- Acted as a technology/business liaison to coordinate BSA data and system updates with inter-agency partners such as the Financial Action Task Force (FATF), Bureau of Fiscal Services, Main Treasury Department, and others

05/2012-02/2014: Financial Crimes Support Analyst (\$50k) Northrop Grumman – Federal Defense Technology Division

- Assist 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)
- Support executive level management with financial intelligence subject-matter expertise in BSA related to future business opportunities in IRS-CI, CFTC, SEC, FDIC, and others

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 cryptocurrency 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