HE/HIM

- Builds resilient organizations
- Creates innovative strategies
- Leads through challenges and change

Luke is highly adaptive, his strengths are his thoughtful leadership, attention to detail, and proficiency at developing creative solutions to complex problems.

He has brokered new engagements through empathetic consultation, finding new applications and markets for tools and services. He has advised government and business leaders facing critical challenges. He has harnessed emerging technologies to shift organizations into nimble, pro-active positions while managing risk.

Luke's wide-ranging expertise covers organizational design and change leadership, coaching, integrated marketing and communications, social science research, geospatial system design, and data science.

EDUCATION

<u>U.S. ARMY WAR COLLEGE</u> Carlisle Barracks, PA Master of Strategic Studies (Distinguished Graduate)

TRINITY UNIVERSITY San Antonio, TX Bachelor of Arts in Political Science

PROFICIENCIES

Data Science Concepts:	Languages:	GIS:
Cluster and Factor Analysis	SQL	ESRI
RDBMS Design and Administration	Python	QGIS
Regression Analysis	R	Maptitude
Natural Language Processing	VBA	PostGIS
Quantitative and Qualitative Research Design	HTML/CSS	GDAL

- <u>GZA-level Genius</u> with the Microsoft and Google Office Suites
- <u>Functionally Competent</u> with Adobe Creative Suite, Gimp, Audacity, and Final Cut
- Hates Quickbooks
- OmniOScient user of Windows, Mac, and Linux (Native and Virtualized/Cloud Environments)

PROFESSIONAL EXPERIENCE:

U.S. DEPARTMENT OF STATE 5/2019-Present Dep Asst Secretary for Research & Analytics Global Public Affairs Bureau

U.S. DEPARTMENT OF STATE 5/2016-5/2019

Analytics Office Director

International Information Programs Bureau

BURSON-MARSTELLER 3/2013-5/2016
Senior Director & Head of Analytics and Innovation

PINAXIS GROUP LLC 12/2011-3/2013

Partner/Research Director

NCEC SERVICES INC 10/2010-3/2013

Senior Political Analyst

PERSEID GROUP LLC 3/2009-12/2011

Owner

OBAMA INAUGURAL COMMITTEE 11/2008-2/2009

Data & CRM Manager

OBAMA FOR AMERICA 4/2007-11/2008

National Data Manager; Great Lakes Data Director

AFT, AFL-CIO 3/2003-4/2007

Campaign Technologist

MD DEMOCRATIC PARTY 5/2002-11/2002

Targeting Director

TUCKER GIBSON LLC 2/2001-5/2002

Redistricting Consultant

WISCONSIN DEMOCRATIC PARTY 7/2000-12/2000

Deputy Voter File Manager

ACTIVITIES:

Girl Scouts Troop Co-Leader 2020-Present

Daisy/Brownie Troop #42103, Washington, DC

Pack Secretary and 2018-Present

Pinewood Derby Race Master

Cub Scouts Pack 33, Takoma Park, MD

Endurance Race Finisher 2011-Present Ironman Florida, SavageMan 70.0, Great Chesapeake

Bay Swim, Marine Corps Marathon

Keyboardist and Audio Engineer 2009-2012

Boniour Ganesh!

SPEAKING AND WRITING:

Panelist 6/2020 U.S. Advisory Commission on Public Diplomacy

Data Driven Public Diplomacy, Six Years Later

Moderator 2/2018

U.S. Advisory Commission on Public Diplomacy IIP Analytics: Research Evaluation and Learning, Research, Analytics, and Learning Summit

Panelist 10/2017

Page Up 2017, Arthur W. Page Society

Information Bubbles, Cognitive Bias, and Communications

Panelist 9/2017

USC/Public Diplomacy Council

The State and Art of Digital Diplomacy, First Monday Forum

Presenter 7/2017

Crimson Hexagon CoLab 3.0

Inoculating Public Opinion Against Disinformation

Author 3/2017

Three Americas Study: A Re-Examination of the 2014
Pew Political Polarization Survey

Presenter 11/2016

State Department Public Affairs Officers' Conference

Public Diplomacy in the Information Age

Panelist 10/2015

Fitbit Captivate Conference 2015

Mobilizing Populations Towards Action

Keynote 2/2014

PR/Social Media Measurement

Making 'Big Data' Meaningful: Putting Analytics Into

Action

Keynote 3/2009

WebTrends Engage

Exploring the Obama Campaign's Data Crunching Advantage

AWARDS & RECOGNITION:

U.S. State Department Service Awards:

Superior Honor 9/2020 Meritorious Honor 7/2018

The Holmes Report 9/2015

The Innovator 25 North America 2015

COURSES & SEMINARS TAUGHT:

New Organizing Institute

2009-2013

- Redistricting: What it is, How it Works, Why it's Important
- Creating Beautiful Reports
- MS Access 101 and 202
- Vote Goals

CBC Boot Camp

2009-2013

• Shoring up the Vote: Targeting, Field, and GOTV

Democratic National Committee 2011-2012

Geographic Targeting for Campaigns

SEIU National Retreat 3/2010

 Data Visualization and Advanced Data Analysis with ArcGIS and R

Analyst Institute 2009-2010

- Pushing Excel and Access to the Limits of Common Sense
- National Reporting Through GIS

AFT Public Employees Conference 6/2009

 Obama Campaign Technology: Tools for Trade Unionists

PROFESSIONAL ROLE DETAILS

U.S. DEPARTMENT OF STATE - Deputy Assistant Secretary, Global Public Affairs - 5/2019 - Present

- As Deputy Assistant Secretary for Research and Analytics, serves as Head of Marketing Insights for foreign-facing Public Affairs of the United States Government.
- Leads, supports, and advocates for a team of 80+ researchers and analysts collecting and presenting data-backed insights to support and influence U.S. government's foreign communications and media strategy on issues of critical national interest.
- Develops and delivers written briefs and oral presentations to senior White House, State Department, National Security Council, Department of Homeland Security, Defense Department officials. Distills and translates complicated research observations into executive recommendations.
- Shapes long-term strategic communications and media plans supporting and influencing U.S. national foreign policy.
- Responsible for \$25m+ audience and marketing research, media analysis offices who help U.S. Government stakeholders understand overseas audiences and their information environments, and then develop integrated marketing and communications campaigns to reach, inform, and influence them.
- Responsible for \$10m+ multi-channel strategic marketing program and budget: planning, executing, measuring
 impact of integrated marketing campaign efforts across mediums including search, display, native, social, and
 over-the-top digital video, broadcast radio, and out-of-home.
- Leads Department towards a proactive, audience-driven, policy impact-focused communications approach.

Policy:

- Hands-on research, marketing, and analytic support and ad hoc requests for U.S. government communications on breaking global issues including the outbreak of COVID-19; geopolitical and national security crises; highly-dynamic events like United Nations meetings and foreign trips for U.S. government principal figures.
- Led research, marketing, and analytic strategy and support for longer-term campaigns including climate change, COVID-19 recovery, advancing safe 5G telecommunications, the Central American immigration security crisis, Israeli-Palestinian relations, U.S.-Iran relations, U.S.-Venezuela relations, promotion of a Free-and-Open Indo-Pacific and enduring American values.
- Serves as a senior working member of the Global Public Affairs Bureau Diversity and Inclusion Forum, leading effort to develop procurement and contracting strategies that will improve Diversity, Equity, Inclusion, and Accessibility practices employed by Bureau vendors
- Represents the Public Diplomacy and Public Affairs family to the Department-wide Enterprise Data Council

Management:

- Managed through dynamic and changing environment to reorganize and reorient two decommissioned bureaus' legacy personnel and assets towards a unified mission in direct support of Department of State communication strategy.
- Led establishment of and oversees two offices comprising a ~\$30 million annual budget within Global Public Affairs (GPA) focused on audience and media research and analytics, worldwide; led and managed through two consecutive years of capacity-doubling and the offices' formal hierarchical elevation.
- Organized two offices' operations and procurement processes; serves as supervisory coach to subordinate managers; schedules and prioritizes work; establishes overall policies, practices, goals; provides technical requirements and descriptions of work to be accomplished.

- Skills and Specific Expertise:
 - Advises on international media engagement, multi-channel advertising and integrated marketing strategy, creative content direction, and audience research strategy including survey design, recruitment, analysis methodology; distills and presents insights to shape foreign policy and business strategy.
 - Develops and edits written analytic products presenting executive recommendations grounded in technical and scientific research and analysis processes.
 - Coaches analysts and researchers on understanding client objectives, strategic thinking, data science methods, marketing communications tactics, product refinement and distribution strategy.
 - Oversees development and implementation of an overarching and comprehensive audience research and analysis strategy to measure and sharpen the bureau's earned, owned, shared, paid communications programs and integrated marketing campaigns advancing U.S. foreign policy goals.
 - Responsible for the overall evaluation strategy measuring impact of bureau programs and products on international public opinion of the United States.
 - Developed and implemented guidance for conducting modern and efficient interagency electronic communication in compliance with NIST, FISMA, FIPS, ODNI, and Department of State information and systems security policies and procedures.
 - Responsible for execution of services, standards, and ensures responsiveness to information technology requirements across two offices according to agency and government standards.
 - Position has required federal security clearances, financial disclosures, rigorous ethical guidelines, and FAC-COR certification.

U.S. DEPARTMENT OF STATE - Analytics Office Director, International Information Programs - 5/2016-5/2019

- On 4-year term appointment: Developed vision and executed two-year organizational turnaround plan for the Office of Analytics at the Bureau of International Information Programs. Enhanced or created Bureau's capacity to remotely support U.S. Embassy Public Affairs staff around the world in target audience research, strategic planning and campaign design, digital advertising, social and digital media analysis, digital and social property auditing, program measurement and evaluation, in-cycle optimization, data science and software engineering, and global rapid response information collection. Grew over 3 years from 7 staff, \$1.4 million budget to 23 staff, \$5.9 million budget.
- Served as State Department Lead for the Data Outcome of the Secretary of State's Redesign Initiative of the
 Department of State and USAID, responsible for scoping the long-term strategic overhaul of the Department's
 enterprise data infrastructure and analytics capacities, with the goal of creating the right technical, cultural, and
 governance environment to bring evidence-based policymaking to the Department, guiding long-term strategy
 for a \$120+ million per year data investment.
- Served on the Secretary of State's Impact Initiative as Keystone Project Leader for an internal communications campaign designed to spark a culture shift towards using data and analytics to inform Department decisions.
- Served on inter-bureau merger task force: over a six month period designed vision, implemented, helped lead
 major change initiative to merge the Bureaus of Public Affairs and International Information Programs together
 comprising nearly \$100 million in annual budget, with over 400 staff on five continents. Skills honed in this effort
 included organizational planning (budget, resources, personnel), change management/leadership, negotiation,
 internal and external communications, congressional lobbying, and demanded extreme delicacy, flexibility, and
 dedication to see through.
- Led research effort supporting White House communications strategies for an Israeli-Palestinian peace deal.
- Led research efforts supporting State Department-wide international communications campaigns on Korean Denuclearization, Iran Nuclear Sanctions, and the South China Sea.
- Led IIP Office of Analytics' comprehensive evaluations of major Department efforts, determining costs, returns, successes and failures of IIP's Youth Networks and ShareAmerica programs, the Department's overhaul of its

Embassy Website platforms, and a 10-year retrospective report on the use, utility, and proliferation of social media including Facebook, Instagram, and Twitter at the Department.

- Procured contract for and initially administered Amazon Web Services cloud systems: managing firewall, virtual
 private cloud, databases (RDS, RedShift, and Aurora), EC2 instances; familiarized data science team with cloud
 administration principles; was responsible for identity access management (IAM) of cloud systems before
 transitioning day-to-day management responsibility to subordinate technical team.
- Responsible for cyber risk management and policy compliance of cloud-based prototyping system; implemented cyber security auditing protocol and brought systems into compliance with policy.
- Led modernization of the Spokesperson's measurement approach to include social and digital media metrics; clarification of objectives and target audiences for communications activities.
- Led development of research methods for assessing the impact of video content on the awareness, opinions, and actions of foreign audiences; oversaw application of methods to content designed to raise trust and relatedness with the people, culture, and government of the United States among Russian speakers worldwide.
- Wrote R programming language code to prototype a new approach to audience segmentation by values, using
 machine learning non-negative matrix factorization algorithms, and produced a robust explanatory visualization
 with R packages ggplot2 and Shiny.
- Led IIP Office of Analytics' target audience research in South America, Europe, Asia, the Middle East, and Africa including oversight of message testing, information environment audits, surveys, in-depth interviews, and focus groups, informing and driving a variety of decisions including several with major national security impact.
- Worked across Bureau and Department with other organizational leaders to reform processes, test new concepts, defuse political crises, and create more positive, productive collaboration.
- Developed partnerships and economies of scale across government (with Treasury Dept., General Services Administration, Broadcasting Board of Governors, others) on research, engineering, and procurement projects.
- Established new interagency and inter-government relationships with U.S. and allied Defense and Intelligence officials on research, including a focus on computational propaganda and mis/disinformation.
- Prepared written briefs and delivered oral presentations on a variety of subjects to senior Department officials including the Secretary, Deputy Secretary, Under Secretaries, and Assistant Secretaries of State.
- Responsible for vetting and managing vendors; wrote and vetted statements of work and vendor requirements; evaluated responses to requests for information and proposals; set, reviewed, and maintained compliance with contract terms
- Position required maintenance of security clearance, FAC-COR certification.

BURSON-MARSTELLER - Senior Director & Head of Analytics and Innovation - Washington, DC - 3/2013-5/2016

- Founded Analytics and Innovation Group: Established, recruited, and led teams responsible for Product
 Development, Data Research, and Measurement, directly managed each of the team leads, consolidating staff
 from other analytics teams. Delivered new and highly-revenue-generating services to top global clients, drove
 major evolution in top-level brand and product strategy for dozens of high-profile corporations. Managed 12
 staff, earned \$3 million in direct annual revenue, drove \$5 million in annual additional cross-practice sales
 revenue.
- Served in thought leadership role, producing internal research, writing corporate blog posts, filling conference speaking roles, and gave guidance in big data and analytics strategy for holding company, WPP.
- Established Amazon Web Services cloud contract and led development team to embrace off-premises technology; implemented Nessus cyber security auditing protocol and rigorously reviewed platform exposure; responsible for identity access management (IAM) for internal user base.

- Designed data research projects, wrote custom data collection and analysis software using R, python, and SQL
 to support research efforts. Led prototyping and construction of systems to combine open source data and data
 proprietary to clients and other WPP network entities to deliver game-changing business insights to clients.
- Performed analysis using a variety of strategies, synthesized and delivered insights to guide strategic
 communications, creative development, and marketing plans to C-suite clients and prospects for companies like
 Ford, Intel, Bank of America, Oracle, Fitbit, Dell, Twitter, Chipotle and coached staff to do the same.
- Named to Holmes Report's The Innovator 25 North America in 2015, recognizing efforts to revolutionize and grow Burson-Marsteller's analytics and research capabilities while creating new revenue streams.

PINAXIS GROUP - Partner/Research Director - Washington, DC - 12/2011-3/2013

- Led research, feature design, and quality control efforts for Apollo, winner of the EHR Accessibility Module Challenge, by Health 2.0 and the Office of the National Coordinator for Health IT.
- Led research efforts, designed workflow, and developed back-end scoring logic model for THUMPr, winner of the HHS Investing in Innovation Initiative's (i2) One in a Million Hearts Challenge through the Office of the National Coordinator for Health IT (ONC).
- Led medical research efforts, wrote clinical decision-making/screening logic for Horizon, a submission in the Reducing Cancer Among Women of Color challenge through Health 2.0 and the Office of the National Coordinator for Health IT (ONC).

NCEC SERVICES INC - Senior Political Analyst - Washington, DC - 10/2010-3/2013

- Provided data-backed advice to elected officials, candidates, chamber caucuses, state parties, labor unions, and nonprofits in 50 states regarding conduct of campaigns and redistricting efforts. Constantly translate and deliver highly-technical analysis and insights to non-technical decision-makers.
- Wrote and deployed enterprise-wide geospatial analysis software platform to programmatically interface with a
 data warehouse I also architected and deployed, designed to flexibly and transparently store redistricting plans.
- Applied agile test-driven-development principles in developing software using python to generate natural language descriptions of newly-drawn political districts using statistical methods to analyze and contextualize information stored in a complex set of disparate SQL databases, which saved a team 8 staff-months of work.
- Wrote software solutions to various legacy challenges in a combination of python, SQL, R, PostGIS, GDAL/OGR, and other languages/platforms (legacy Access/VBA/FoxPro); Developed Extract-Transform-Load (ETL) scripts to Microsoft SQL Server, PostgreSQL, SQLite, and MySQL for several hundred data sources and formats.
- Assisted in administration of legacy Microsoft SQL Server database, led transition to and administration of PostgreSQL servers; led security incident handling and response: intervention of, clean-up after, security upgrade following a major cyber intrusion of the company's legacy web servers.
- Track record of promoting and introducing Open-Source technologies as equivalent or superior solutions to legacy systems and problems, and leading coworkers to develop skills on these newly-adopted tools.
- Taught and mentored staff in effective use of software and statistical techniques.
- Before easier methods existed, wrote an open-source Excel/VBA module for geocoding based on
 <u>DataScienceToolKit</u> address2coordinates API, used by colleagues to identify geospatial locations in bulk based on addresses.

PERSEID GROUP LLC - Owner - Washington, DC - 3/2009-12/2011

- Managed firm operations, finances, contractors, vendors, business development, and client services.
- Advised corporate and non-profit clients, developing and implementing analytics-driven management strategies and technology tools enabling clients to achieve their goals.

- Wrote multi-year-time-horizon strategic technology development roadmap for medium-sized data warehouse/software/analysis firm.
- Pioneered use of Map-Reduce technology to solve client's long-standing aggregate analysis difficulties; compared and contrasted various data storage platforms to determine where performance and efficiency could be enhanced by additions to client's technology arsenal, rather than simply introducing complexity to existing systems. Developed Extract-Transform-Load (ETL) protocols and scripts for over 50 data input formats.
- Built and administered cyber platforms using GoGrid and Amazon Web Services cloud-based systems to support the business and its client engagements. Developed software extensively in python, R, SQL, VBA, and PHP; participated in client scrums and code reviews of work in additional languages including Java and Scala.
- Responsible for full-scope cyber assurance: incident response, SIEM, audit and compliance, firewall
 management, IDS/IPS, anti-virus and malware countermeasures, data management of systems containing
 extremely high-risk sensitive PII, medical, and financial client-confidential information.
- Developed customer, partner, vendor, and employee relationships for clients, including oversight of vendor RFP processes, interviewing of potential staff, negotiating product-partner terms, and traditional B2B and B2C sales.
- Recruited and led teams to write groundbreaking reports employing technical research methodologies.
- Designed and deployed FINRA-compliant data and cyber security measures into tech infrastructure to allow statistical analysis of databases containing personally-identifiable information for a finance client.

PRESIDENTIAL INAUGURAL COMMITTEE - Data & CRM Manager - Washington, DC - 11/2008-02/2009

- Recruited and led a team of 5 in rapidly designing and executing overall data plan, determined and advocated scope of work, recruited and managed staff and vendors, worked with senior leadership to meet overall goals.
- Designed and implemented cloud-based Salesforce CRM system for 200+ users, facilitating coordination of critical activities from ticket allocation and distribution to volunteers, housing, and motor pool management.
- Responsible for cyber assurance and security: proper handling of PII, financial information, and a very complex identity access management system for hundreds of users with access control lists at the record level.
- Coordinated staff and vendor teams to allocate 120,000+ individual tickets on ambitious, high-risk deadlines.

OBAMA FOR AMERICA - National Data Manager; Great Lakes Data Director - Chicago, IL - 04/2007-11/2008

- Designed and led from-scratch build-up of national data program; planned, budgeted, and implemented websites and tools used by 30,000+ staff and volunteers to share information on 160+ million voters, donors, political contacts, and delegates over the course of the campaign.
- Led charge internally to embrace volunteer recruitment as heart of campaign's field efforts; persuaded campaign to adopt an open, decentralized, internet-based volunteer model as centerpiece of primary and general campaigns, with special attention to non-traditional areas.
- Spearheaded campaign primary strategy to focus on post-January contests by developing statistical models of delegate apportionment scenarios for national convention and state caucuses, a move that helped Obama win delegates by preparing well in advance for a drawn-out nomination battle.
- Established and managed business relationships with data vendors and state parties for primary campaign; negotiated with labor organizations, the national party committee, and others to establish data sharing agreements which ultimately saved \$2+ million by eliminating redundant voter contact efforts.
- Recruited, trained, led, and coordinated state data personnel in primary campaign; developed and mentored data staff in general election (including instruction at a 3-week intensive training camp); oversaw state data personnel in IL, IN, KY, MI, OH, PA, and WV during general election.
- Managed data for 200k+ precinct polling locations, enabling internet-and-telephone-based "find your polling location" programs used by millions of voters in all 50 states.

- Designed performance analysis for the New Media department, enabling campaign leadership to understand ROI of online marketing efforts on fundraising, with significant budget consequences.
- Assisted Voter Targeting Analysis Team in construction and diagnostics of statistical models based on various data mining techniques and strategies, built complex approaches using SQL and Microsoft Access.
- Managed a team of 12 staff with diverse functions and hours through primary contests.

AMERICAN FEDERATION OF TEACHERS - Campaign Technologist - Washington, DC - 3/2003-4/2007

- Directed projects nationwide as campaign technologist, including on-site work in over 25 states.
- Responsible for overseeing vendor contracts and streamlining office procedures in conjunction with state and local affiliates, resulting in savings of \$100k+ and many work hours.
- Designed and deployed online associate member recruitment program; managed segmented e-mail contact program and performed creative development of membership-facing digital communications content.
- Developed and managed AFT's first online dues collection software system, enabling affiliates without payroll
 deduction agreements to process recurring credit-and-debit card payments as alternatives to checks and cash.
- Developed remotely-deployable CRM software using Citrix, Microsoft SQL Server, and Microsoft Access to track members displaced by hurricanes Katrina and Rita, allowing AFT to send relief checks, and enabling storm-affected locals to effectively communicate with members.
- Led affiliated organization to explore off-premises technology, establishing contracts with Rackspace to solve
 major rapid cyber technology procurement challenges; administered LAMP (Linux, Apache, MySQL, PHP)
 servers, managed secure FTP sites to enable large remote file transfers of sensitive PII data; responsible for
 security incident handling and response on the affiliate's systems (SIEM, audit and compliance, firewall/IDS/IPS).
- Led education policy research on charter school performance in Ohio. Used Microsoft Access to analyze school testing data and drafted press talking points to pre-empt the state's annual education data release.
- On several staff committees and inter-departmental project teams with oversight of national union's new-technology programs. Specifically focused on internet-based member mobilization.
- Wrote VBA-and-SQL based membership data management software to interface with enterprise
 national-organization-wide SQL server, assisting users with management of authorization votes, job actions,
 political elections, fundraising drives, member-mobilization, and other focused projects.
- Pioneered use of key-value stores for organizing loosely-structured membership and recruiting information.
- Traveled to Erbil, Iraq to help Baghdad's public school teachers develop a political organizing program and establish a stake in Iraqi parliamentary process; trained Kurdish civil society leaders in political organizing.