Frank Burdell has supported digital transformation and software development initiatives in the US House, Office of Legislative Counsel; US House, Office of the Clerk with Xcential; and Democracy Fund's BillMap with GovTrack and Xcential. Additionally, he has led electoral and technical programs and operations at the caucus political arm of the Pennsylvania State House of Representatives, FIRST Global, and on campaigns at various levels of the ballot including municipal legislative, state legislative and judicial, and federal legislative.

Frank currently consults on Veterans Affairs Office of Enterprise Integration in their efforts to design and engineer enterprise data management governance structures.

His expertise includes modeling, designing, and testing functions, relations, and requirements of business processes, data ontologies and governance, and system architectures; benchmark and metric development; employee and voter survey methodology and development; strategic stakeholder engagement and communications; predictive analysis with applications in classification, clustering, regression, optimization, and dimensionality reduction; and extract-transform-load development.

Frank received his Bachelor of Arts in Political Theory at the University of Virginia in Charlottesville, VA and is currently engaged with non-degree seeking studies in Applied Maths at Harrisburg Area Community College in Harrisburg, PA. He was the NCAA Div. I, Colonial Athletic Association; Swimming and Diving, 2011 Rookie of the Year.

Professional History

Dynamic Integrated Services

SDVOSB management and strategy firm providing enterprise optimization and communication services to federal clients. Reported to the Vice President of Enterprise Optimization on engagements with the US Veterans Affairs, Office of Enterprise Integration with Palantir.

Consultant, Data Management & Governance, 2021 - Present

Kastling Group

Boutique computer systems design and management consulting firm providing enterprise digital modernization and transformation to federal clients. Reported to the CEO and CTO on engagements with the US House, Office of Legislative Counsel; US House, Office of the Clerk with Xcential; and Democracy Fund's BillMap with GovTrack and Xcential.

Consultant, Systems & Analytics, 2020 - 2021

Responsibilities

- Modeling, engineering, and testing functions, relations, and requirements of United States legislatives processes and behavior in parrallel with technical architecture and interoperations for digital development / transformation and human-centered design projects in an Agile / MBSE, (Plant-)UML / Python, and Google Cloud environment.
- Analytic development focusing on sentiment inference and prediction, survey methodology / execution / analysis, and operational metrics in Qualtrics, BigQuery, Azure / Google DataStudio, and Colab.

Accomplishments

- Developed and implemented employee, client, and user opinion and experience surveying / sampling and relational networking, focus-grouping, and workshopping via Qualtrics and traditional methods.
- Developed and maintained automated functional testing and continuous integration pipeline in Google Cloud, GitHub Actions, and Python / Selenium.
- Developed agglomerative clustering model in scikit-learn with interactive Bokeh dashboarding to describe employee working relationship and attitudes for workload redistribution, process re-engineering, and executive operations planning.

House Caucus Campaign Committee

Caucus political arm of the Pennsylvania State House of Representatives chartered with securing partisan majorities. Directed six- and seven-figure electoral media and polling programs with five direct-reporting and over thirty indirect-reporting field and political staff over two general-, two primary- and six special-election cycles for nationally targeted caucus.

Specialist, Data & Analytics, Election Cycle 2020

Interim Executive Director, HD85 & HD190 Special Elections 2019

Director, Political & Operations, Election Cycle 2018

Responsibilities

Intermediately directed, and managed executive committee leadership, budget, stakeholders, staff, operations and communications for two special election cycles.

- Directed and assisted in planning, execution, testing, and analysis of seven-figure polling, media, and field programs.
- Managed staff of 5-30 with varying levels of authority, as well as executive and staff training and instruction.
- Application / database administrator and engineer for > 2,000 non/technical users and executive leadership in the VAN at tier III / VII support and 20 users in BigQuery environment at tier II / VII support.

Accomplishments

- Designed, built, and operationalized committee, campaign and executive facing ETL pipelines across federal, state, media, and vendor Python / REST API's and sources with BigQuery / PostgreSQL and Ubuntu Server, analytics and metrics processing $2-5{\rm Gbpd}$ in Python, voter targeting and management to BigQuery-Phoenix / the VAN, and interactive reporting and dashboards in PostgreSQL / BigQuery, DataStudio and Colab / Bokeh.
- Voter targeting and contact and media operations resulting in up to 16% increase in voting probability.
- Developed random forest classifier to mid 80% accuracy scores to measure preference volatility of voters, in addition to operational optimizations, and prioritizations methods and models.

Responsibilities

- Directed, and managed committee leadership, budget, stakeholders, staff, operations and communications.

Accomplishments

- Successfully executed campaign cycle for two six-figure special elections.

FIRST Global

Consultant, Operations and Logistics, Summer 2017

Responsibilities

- Development and management of six/seven-figure operational / logistic programming and team of 15-20 vendors/consultants in an implementation engagement with the initial annual international robotics competition.

Accomplishments

- Successful completion of six/seven-figure event transportation, housing, and meals for >2000 competitors from 158 countries and data management solutions for media production team.

PA State House & PA Common Court Campaign Commitee

Campaign Manager; General Election 2016 & Primary Election 2017

Designed and managed six-figure financial, organizational and operational, communications and media, research and polling, field strategies, and staffs of 3-30 for two campaigns in southwestern Pennsylvania—a dual-ballot campaign in cross-partisan primary election, and an incumbent-defense campaign overperforming top-of-ticket for state's top three competitive elections.

Fairfax Board of Supervisors & U.S. Senate Campaign Committee

Organizing Director; General Election 2015 & Primary Election 2016

Ravensworth Swim and Racquet Club Head Coach, Summer 2012

Sideburn Run Recreation Association Head Coach, Summer 2009 & 2010

Dominion Dive Club

Tools

Analysis

Python (NumPy, scikit-learn, Bokeh, Shapely, NetworkX, Selenium), ESRI Arc (GIS, Map, Catalog), (Plant-)UML / SysML / MBSE

Data

SQL (BigQuery, Postgres, MS-, T-, Phoenix), Bash, SSH, REST, TLS / SSL, SSH, JSON, XML (USLM), YAML / Markdown, VAN / NGP, Qualtrics, Azure / Google Data Studio

Management

Git, PuTTY, Jira, Asana, Trello, Agile (Scrum, Behavior-Driven), Linux (Ubuntu), Windows, Microsoft Project

Other

vim, IATEX, Google Suite (Docs, Sheets, Slides, API), Adobe (InDesign, Photoshop, Acrobat), LexisNexis, Associate Press / Chicago Style

Other History

FieldBlue

Advisor, 2021 - Present

Technical and strategic advice for political technology start-up.

Project Keystone, Board of Directors

Member, 2019

Advisor, 2018 - 2020

Provided analysis and strategy for seven-figure polling and research consortium focused on legislative races in Pennsylvania.

Turn Pennsylvania Blue

Volunteer, 2020

Provided data, targeting, and analytic services to volunteer-driven electoral committee.

The OpenElections Project

Volunteer, Winter 2018

Developed Python module to transform and standardize election files from Pennsylvania to specified structure.

U.S. Commission on Civil Rights, Eastern Regional Office

Intern, Summer 2013

Virginia House of Delegates, Office of the Minority Leader

 $\mathbf{Intern}, \ \mathrm{Fall} \ 2012$

Projects

Comparative Print Testing Suite

Automated testing and continuous integration pipeline in Google Cloud, Github Actions, and Python / Selenium.

Partisan Variance Model

Random forest classifier to mid 80% model accuracy scores to measure preference volatility of voters providing voter classifications outperforming comparable models by 4-8%.

Integral Approximation

Approximating 2-dimensional functions given its integral and boundaries.

Certifications

Data and Analytics Certificate - Google, 2021

 $Validation : \underline{ \text{Public URL}}$

Education History

Non-Degree Seeking - Harrisburg Area Community College, 2019

Coursework: Calculus I.

BA; Political Theory – University of Virginia, conferred 2014

Coursework: Epistemology, Symbolic Logic, Classical Theory, Classical Leadership Theory, Concepts of Law, Perspectives on Liberty, Contemporary Thought, Contemporary Ethics, Political Economy, Politics of Developing Areas, Politics of the Environment, Microeconomics I, Macroeconmics I, Statistics I, Physics I.

NCAA Div. I, Colonial Athletic Association; Swimming and Diving: 2011 Rookie of the Year.

