Professional & Military Experience

U.S. DEPARTMENT OF AGRICULTURE-AMS GRANTS DIVISION

Washington, DC

Data Scientist

September 2022 - Current

- Developed a grant allocation model using **Python** (Pandas, NumPy) to optimize funding distribution across \$400M USD using agriculture and socio-economic data.
- Directed end-to-end development of data infrastructure and applications, automating workflows and improving data accessibility to include complete ETL pipelines.
- Developed multiple **Tableau** <u>public-facing</u> and internal dashboards/data tools to increase stakeholder awareness of grant programs, averaging 5,000 monthly views.
- Applied Python libraries (NLTK, PyPDF2, scikit-learn, Seaborn, Matplotlib) for data mining, NLP, and machine learning, delivering key insight into grant programs.
- Supervised a team of 4 data scientists to execute projects involving automation, infrastructure, and analytics, utilizing **Hive**, **Power Platform**, **Databricks**, and **Azure** to streamline workflows.
- Conducted 12-month training sessions for 20+ staff on **Excel** and **Tableau** to improve data literacy in division.
- Completed a 10-month Data Science Training course, advancing expertise in **Python** for analytics, NLP, data mining, and supervised/unsupervised machine learning models.
- Developed and testing RAG based Chatbot built using **Python** open source models in **Databricks** environment.

J.E. AUSTIN ASSOCIATES INC.

Washington, DC

Research Associate

September 2021 – June 2022

- Co-authored a comprehensive report on the opportunity analysis of Pakistan's agro-processing sector, evaluating sub-sector supply chains, production capacities, and actionable recommendations.
- Designed and visualized multiple dashboards in **Tableau** for business development projects, analyzing agricultural supply and demand trends for various commodities.

WORLD BANK: AGRICULTURE & FOOD GLOBAL PRACTICE

Remote, DC

M&E Consultant

June 2021 - October 2021

- Consulted with India team in development of gross margin survey for apple orchard project analysis.
- Conducted benchmark research on regional orchard production data using Stata, enabling comparative analysis of apple horticulture development outcomes.
- Synthesized production and logistics data to create a supply chain database, producing visual reports and metrics to monitor agricultural business intelligence and project performance.

PEACE CORPS: BAMBOO INSTITUTE

Timor-Leste

Project Manager and Business Analyst

August 2017 - March 2020

- Provided consultation to bamboo social-enterprise in order to increase growth and impact on income generation within the agriculture, manufacturing, and eco-tourism sectors growing sales from \$90,000 USD to over \$450,000 USD annually.
- Managed and trained 21 employees using local language in order to audit, digitize, and analyze business models as well as increase capacity for information-reporting systems.
- Created and implemented procurement and fulfillment databases and a finance model using **Access DB**, **Tableau**, and **Excel Solver** to analyze marketing strategies, forecast demand and supply, and optimize production output.
- Wrote a case study on Bamboo Institute's sustainable business model impacts on poverty alleviation and economic growth.
- Secured and managed agriculture/business grant projects of over \$400,000 USD developing manufacturing capacities, poverty alleviation in rural areas, and economic opportunities for bamboo farmers and carpenters.
- Conducted monitoring & evaluation for project and business investments to present findings to partners such as USAID, GIZ, UNDP, Prime Minister, and Minister of Agriculture and Fisheries.

RHODE ISLAND PUBLIC EXPENDITURE COUNCIL

Providence, RI

Economic Analyst Intern

October 2016 - June 2017

- Published state debt position and budget outlook review publication to increase voter knowledge for ballot initiative questions. (Publication Link)
- Conducted in-depth research on state revenues, expenditures, and economic development to benchmark Rhode Island's rankings in standards of living, including education, transportation, environment, and public safety.
- Designed and implemented an automated data-to-dashboard process for a major report, reducing data management lead-time from two months to less than a week using advanced **Excel VBA** tools.

Shaun.C.Rolph@gmail.com

Github Portfolio

(508) 735-4206

OCC DEPARTMENT OF TREASURY

Economic Research Pathway Intern

Washington, DC June 2016 – January 2017

- Researched and analyzed regional economic dependencies and their impact on banking and housing prices at the county level, working with over 10 million observations using SAS, Python, and Tableau.
- Collaborated with FDIC, CFPB and other organizations on research to implement policy change on appraisal threshold limit for property transactions.
- Computed data and researched working paper on national bank board of director composition of females and the correlation on firm performance before, during, and after the financial crisis.
- Designed and developed a **Tableau** dashboard providing insights on hotel market fundamentals, including supply/demand trends, loan originations, CRE data, travel expenditures, and competition with Airbnb.

AMERICAN TRUCKING ASSOCIATION

Washington, DC

Economic Research and Policy Intern

June – September 2015

- Researched and analyzed eight databases and indexes using **Tableau** and **SPSS** to support the Chief Economist in forecasting economic trends and outlooks in the trucking industry.
- Conducted Safety Expenditure Survey and statistical analysis to provide market benchmark and policy information.
- Constructed Salary Compensation Survey to analyze compensation in a market of \$700 million USD in revenues.

AMICA INSURANCE Lincoln, RI

Marketing Research Analyst

October 2014 - June 2015

- Leveraged SAS, Access, and Tableau to synthesize marketing data, producing 23+ weekly reports and ad hoc analyses that enabled upper management to evaluate marketing effectiveness and strategic outcomes.
- Assisted in creating non-buyer survey study of customer demographics, preferences, needs, and buying habits to identify potential markets and factors affecting untapped product demand.
- Attended bi-weekly meetings on demographic and psychographic analysis of marketing data for campaigns.
- Visualized millions of pieces of data in order to more effectively communicate within weekly and Ad Hoc campaigns.

NATCO HOME PRODUCTS

West Warwick, RI

Credit Analyst

March 2013 - October 2014

- Balanced international accounts payable/receivable, paying over \$1.6 million USD to companies for product discounts, defective good repayments, and miscellaneous allowances.
- Analyzed and researched all contract agreements, budgeting, chargeback claims, freight deduction types, and miscellaneous allowances to streamline credit processes and create a standard operating procedure.
- Streamlined data processes by leveraging Excel VBA, reducing data input time from weeks to a single afternoon.

UNITED STATES MARINE CORPS

Camp Lejeune, NC/Afghanistan August 2009 – December 2012

Finance Manager

Awarded 7 Medals and 13 personal awards, Secret Security Clearance.

Finance Manager May – December 2012

- Supervised and mentored 15 finance representatives answering 55-100 calls and computing 100-150 complex daily financial claims computed using Excel and CRM Marine Corps Total Force System.
- Created standard operating procedures for over 25 processes on customer service, fiscal budgeting, and internal audit operations for superiors, peers, and subordinate colleagues.
- Computed pay totaling more than \$112,000 USD and took in collections on pay issues for more than \$96,000 USD.

Finance Project Manager, Afghanistan

August 2011 - May 2012

- Paid out over \$4 million dollars in U.S. and Afghan currency through economic projects and cash payments.
- Trained over 120 paying agents while balancing, managing, and reconciling all accounts with 100% accuracy.
- Prioritized, funded, and managed projects to develop the economy within Southern Afghanistan by improving education, infrastructure, business practices, and transportation using **ERP Deployed Disbursing System**.
- Presented a pre-deployment brief of financial entitlements for more than 500 service men and women.

Finance Clerk/Internal Auditor

April 2010 – August 2011

- Provided service to 77,500 Marines processing over \$200 million USD in electronic fund transfers, manual pay adjustments, special payments, liquidations, and collections as an essential part of the financial team.
- Completed audit before third party audit and awarded Navy Marine Corps Achievement medal for 97.7% accuracy.

Shaun C. Rolph

Shaun.C.Rolph@gmail.com
Github Portfolio

Technical Skills

Programming Languages: Python, SQL, Stata, and SPSS

Data Tools: Jupyter Notebooks, Databricks, SAS, Excel (VBA, Solver), MS Power Platform, and Hue/Impala. **Enterprise Systems:** Azure, Hive, SAP ERP, USMC CRM and ERP Systems, and AWS Grants Management Portal.

Data Visualization: Tableau, Power BI, ArcGIS, and Matplotlib

Language Skills

English: Native proficiency

Tetum Dili: Professional working proficiency

Education

GEORGETOWN UNIVERSITY, Walsh School of Foreign Service GPA 3.58 Washington, DC Master of Global Human Development, Specialization: Quantitative Analysis and Evaluation Expected May 2022 Certificate: Social Innovation and Global Development

- GHD Capstone: Worked with Silverleafe CSR in order to provide WASH education and water access to villages in Uzbekistan.
- <u>Relevant Courses:</u> Development Finance, Venture Cap & Impact Investing, Strategy, Design & Implementation, Cost Benefit Analysis, Evaluation of Programs & Projects, Sustainability, Innovation, & Technology, and Global Social Innovation.

BRYANT UNIVERSITY GPA 3.39 Dean's List: 6 semesters

Smithfield, RI May 2017

(508) 735-4206

Bachelor of Arts in International Political Economy

- Minors: Global Supply Chain Management, Psychology
- <u>Key Project:</u> Collaborated with Hasbro logistics team to design a dashboard analyzing carrier lead times and compliance risks, resulting in a \$12M cost-saving recommendation.
- <u>Published Work:</u> Corruption's Impact on Government Health and Education Expenditures, Bryant Economics Research Papers, Vol. 10, 2017.
- <u>Relevant Coursework:</u> Budget & Resource Management, Financial Accounting, Bargaining and Negotiations in International Conflict, Global Supply Chain Management Models and Analysis, Global Politics, Economic Growth and Development, Currents Affairs in East Asian Economy, Economic Capstone, and GSCM Capstone.

USMC FINANCIAL MANAGEMENT SCHOOL

Financial Technician Certificate

Camp Johnson, NC February – April 2010