

ABOUT ME

COMPUTER SCIENTIST WITH 3 YEARS EXPERIENCE IN LEADERSHIP, DATA SCIENCE, AND PROBLEM-SOLVING. RELIABLY FAST LEARNER ACROSS ALL TOPICS. INDEPENDENTLY IMPLEMENTED AND DEPLOYED TERABYTE-SCALE AWS GENOMICS PIPELINE IN 4 MONTHS PART-TIME. DEVELOPED NOVEL ML ARCHITECTURES FOR UNBALANCED DATASETS (1000:1), RAISING RARE-CASE DETECTION FROM 15% TO 90% WITH NO LOSS IN ACCURACY. LEVERAGES COMMUNICATION AND PROJECT MANAGEMENT SKILLS TO INTEGRATE SME, BUSINESS, AND STAKEHOLDER NEEDS.

EDUCATION

- BACHELOR'S IN COMPUTER SCIENCE** 2019-02 - 2022-08  
*AT WESTERN GOVERNORS UNIVERSITY IN UTAH, USA (ONLINE)*

THRIVED IN A SELF-DIRECTED REMOTE ENVIRONMENT

- DEVELOPED APPOINTMENT SCHEDULING AND CUSTOMER DATABASE TOOL IN JAVA.  
SQL OOP JAVA
- COMPTIA PROJECT+** *ISSUED BY PEARSON VUE* 2019-07  
VALIDATE *WITH REGISTRATION: 358639011 VALIDATION: 155946649*  
DEMONSTRATED UNDERSTANDING OF PROJECT MANAGEMENT ROLES, PROCESSES, AND DOCUMENTATION.

- PROJECT MANAGEMENT SDLC REQUIREMENT MANAGEMENT  
TECHNICAL COMMUNICATION
- IT INFORMATION LIBRARY FOUNDATIONS CERTIFICATION (ITIL)** *ISSUED BY AXELOS* 2020-08  
DEMONSTRATED UNDERSTANDING OF DESIGNING, DEPLOYING, MAINTAINING, AND RETIRING IT RESOURCES.  
SDLC REQUIREMENT MANAGEMENT VALUE DELIVERY  
SERVICE MANAGEMENT

PROJECTS

- INTERPLAN** [LINK](#)  
TASK DEPENDENCY MANAGEMENT FROM A GRAPH DATABASE
  - DEVELOPED A NEO4J+REACT DEPENDENCY RESOLUTION AND TASK STATUS TRACKING WEB APP.  
PROJECT MANAGEMENT WEB DEVELOPMENT  
TEST AUTOMATION & VALIDATION REACT
  - PACKAGED REACT APP AND NEO4J DATABASE IN DOCKER & KUBERNETES FOR EASY MIGRATION.  
DOCKER/KUBERNETES LINUX/BASH

- MARKNOTES** [LINK](#)  
INTUITIVE JOURNALING TOOL DESIGNED TO ENCOURAGE LONG-TERM REVIEW AND INTROSPECTION
  - IMPLEMENTED MONGODB AND NODE API FOR DESTRUCTURING, STORING, AND QUERYING MARKDOWN ENTRIES AS SEMI-STRUCTURED DATA.  
DATA ENGINEERING MONGODB
  - PACKAGED REACT APP AND MONGODB IN DOCKER & KUBERNETES.  
DOCKER/KUBERNETES LINUX/BASH

- NETTIMELOG** [LINK](#)  
MINIMALIST, ACCURATE TIME TRACKING
  - CREATED TIME-TRACKING WEB APP WHICH RECORDS WHAT YOU JUST COMPLETED, SO YOU NEVER ESTIMATE WHAT YOU WILL DO OR HOW LONG IT WILL TAKE.  
WEB DEVELOPMENT PYTHON FLASK

IMPACT & EXPERIENCE

- SOFTWARE ENGINEER** 2021-03 - 2021-08  
*AT PLUTON BIOSCIENCES IN ST. LOUIS, MISSOURI, USA* [LINK](#)  
*UNDER DR. BOAHEMAA ADU-OPPONG* *SHE/HER* [BAdu-OPPONG@PLUTONBIO.COM](mailto:BAdu-OPPONG@PLUTONBIO.COM)

DATA ENGINEERING SUPPORTING BIOINFORMATICS RESEARCH

- INDEPENDENTLY DESIGNED, IMPLEMENTED, AND DEPLOYED TERABYTE-SCALE AWS GENOMICS PIPELINE IN 4 MONTHS, FROM NO PRIOR GENOMICS OR AWS EXPERIENCE.  
PROJECT MANAGEMENT DOCKER/KUBERNETES TEST AUTOMATION & VALIDATION LINUX/BASH PYTHON  
DATA ENGINEERING SOFTWARE ENGINEERING OPTIMIZATION RAPID LEARNING AWS SELF-DIRECTION
- INTERFACED WITH SMEs TO GATHER, INTERPRET, AND EXECUTE ON PIPELINE REQUIREMENTS. INTERFACED WITH BIOINFORMATICS PIPELINE DESIGN EXPERT FOR HIGH-LEVEL GUIDANCE.  
PROJECT MANAGEMENT REQUIREMENT MANAGEMENT TECHNICAL COMMUNICATION
- DESIGNED, IMPLEMENTED, DEVELOPED TRAINING FOR, AND DOCUMENTED AN IN-HOUSE PYTHON API ENABLING (NON-CS) BIOLOGISTS TO DEPLOY MULTI-STAGE GENOMICS QUERIES WITHOUT RELYING ON THE CS TEAM.  
REQUIREMENT MANAGEMENT TECHNICAL COMMUNICATION PYTHON SOFTWARE ENGINEERING  
VALUE DELIVERY SERVICE MANAGEMENT DOCUMENTATION
- LED THE CS TEAM IN ADOPTING CI/CD TOOLS LIKE GIT, AWS CODECOMMIT, AND DOCKER / AWS ELASTIC CONTAINER REGISTRY.  
DOCKER/KUBERNETES TEST AUTOMATION & VALIDATION SDLC VALUE DELIVERY SERVICE MANAGEMENT  
AWS LEADERSHIP GIT CI/CD

- EMBEDDED SYSTEMS ENGINEER (CONTRACTOR)** 2019-01 - 2020-01  
*AT APPLIED SEPARATIONS IN ALLENTOWN, PENNSYLVANIA, USA* [LINK](#)  
*UNDER AARON ALLEN* *HE/HIM* [MNRNLN@gmail.com](mailto:MNRNLN@gmail.com)

DEVELOPED CUSTOM C++ / ARDUINO PUMP CONTROL SOFTWARE

- DESIGNED AND DEVELOPED PUMP CONTROL SOFTWARE FOR CHROMATOGRAPHY AND ANALYTICAL CHEMISTRY SYSTEMS.  
SDLC SOFTWARE ENGINEERING C++
- WROTE A SIMPLE HEURISTIC SCHEDULER & VIRTUAL THREADING TO MANAGE REAL-TIME (60Hz+) PUMP CONTROL, TOUCH SCREEN INPUT, AND DATA/CONTROL COMMUNICATION, ALL ON A SINGLE ARDUINO MEGA.  
ALGORITHM DESIGN & SELECTION SOFTWARE ENGINEERING OPTIMIZATION
- DESIGNED AND VALIDATED MASS DELIVERY TRACKING, PREDICTION, AND SMOOTHING ALGORITHMS, TO HANDLE NONLINEAR FEEDBACK DELAY.  
TEST AUTOMATION & VALIDATION DATA ENGINEERING ALGORITHM DESIGN & SELECTION  
SOFTWARE ENGINEERING MATHEMATICS
- INTERFACED WITH SEPARATE DEVELOPMENT TEAM IN CHARGE OF CHROMATOGRAPHY CONTROL SOFTWARE. COLLECTED AND IMPLEMENTED REQUIREMENTS FROM INSTRUMENTATION ENGINEER.  
PROJECT MANAGEMENT SDLC REQUIREMENT MANAGEMENT TECHNICAL COMMUNICATION DOCUMENTATION  
TEAMWORK

- MACHINE LEARNING RESEARCHER (INTERN)** 2017-01 - 2017-05  
*AT PACIFIC NORTHWEST NATIONAL LABORATORY IN RICHLAND, WASHINGTON, USA* [LINK](#)  
*UNDER DR. ENOCH YEUNG* *HE/HIM* [EYEUNG@UCSB.EDU](mailto:EYEUNG@UCSB.EDU)

ML RESEARCH AND DATA ENGINEERING INTERN

- DESIGNED AND TESTED NOVEL NEURAL NETWORK ALGORITHMS, ARCHITECTURES, AND ERROR FORMULATIONS FOR NLP, IMAGE CLASSIFICATION, AND TIME-SERIES DATA CLASSIFICATION.  
PYTHON DATA ENGINEERING ALGORITHM DESIGN & SELECTION MATHEMATICS RAPID LEARNING  
MACHINE LEARNING TENSORFLOW NLP NEURAL NETWORKS
- DEMONSTRATED INCREASED TEST ACCURACY (15% → 90% DETECTION WITH HIGHER BAYESIAN CONFIDENCE) ON UNBALANCED (1000:1) DATASETS, WITHOUT DUPLICATION, AUGMENTATION, OR BATCH FILTERING.  
TEST AUTOMATION & VALIDATION ALGORITHM DESIGN & SELECTION MATHEMATICS MACHINE LEARNING  
STATISTICS EXPERIMENTAL DESIGN
- WORKED INDEPENDENTLY, BALANCING MULTIPLE PROJECTS AND DELIVERABLES WITH MINIMAL MENTOR SUPERVISION, OFTEN MEETING EVERY TWO WEEKS.  
PROJECT MANAGEMENT TECHNICAL COMMUNICATION