Omar Ali

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Education

University of Illinois at Urbana-Champaign: December 2012

   Bachelor of Science in Mathematics   GPA: 3.24/4.00
   Bachelor of Science in Chemistry

Highlighted Projects

Python-based Numerical Integration Application   McCampbell Analytical
· Interactively integrates area under curve based on screen capture image   August 2018
· Includes GUI (tkinter/OOP)

Data Cleanup and Calculation, VBA Macro   Center for Chemistry and Technology
· Finds paired quality control samples in ICP-OES structured data set   August 2016
· Immediately adopted by entire lab staff due to ease of use

Work Experience

Melissa Informatics: November 2018 – Present
 Knowledge Engineer   Berkeley, California
· Troubleshoot and maintain legacy code for medical database ETL processing using SQL and Python
· Assisting in hiring process, administering technical interviews and guiding team growth
· Wrote table-parsing Visual Basic script, speeding up existing program ten-fold

McCampbell Analytical: August 2017 – October 2018
 Research & Development Analytical Chemist   Pittsburg, California
· Corrected faulty software algorithms by writing image parsing numerical integration program in Python
· Serve as *de facto* technical consultant, receiving high praises for clear communications with clients
· Routinely query data in MS Access-based LIMS database and process data in Excel

Northwestern University: September 2016 – August 2017
 Quantitative Bio-Element Imaging Center, Research Technologist II   Evanston, Illinois
· Prepared data validation packages, including statistical analyses and graphical summary of results
· Trained graduate students in data analysis, illustrating common discrepancies indicative of error
· Used R to select appropriate calibration model based on regression diagnostics

University of Illinois, Urbana-Champaign: *Various Titles Held*   August 2008 – August 2016
 Center for Chemistry and Technology, Assistant Analytical Chemist   March 2014 – August 2016
· Wrote dynamic, user-friendly VBA code to parse, seek, and compute QC criteria in large data array
· Increased throughput four-fold for time-sensitive project by streamlining analytical processing

 Illinois State Geological Survey, Geochronology Lab Technician   February 2010 – October 2012
· Headed data processing, including statistical calculations and graphics via VBA and MS Excel
· Recovered corrupt files from destructive analysis, merging disparate data into cohesive results

Technical Skills

Chemistry & Life Sciences:	Math & Statistics:	Software Packages:	Languages:
· HR-ICP-MS, LA-ICP-MS	· Logistic Regression	· MS Office/Excel	· MATLAB
· IC, IC-FI/ICP-MS	· ANOVA/ANCOVA	· Virtuoso	· Python
· GC-MS, GC-FID	· Model Selection	**Operating Systems:**	· SQL
· Glass welding	· Linear Algebra	· Windows	· R
· PCR/PAGE	· Time Series	· Linux	· C