Timothy J. Schiffer

tjschiffer@gmail.com
(856) 366-5736

tjschiffer.com

42 Dell St
Sleepy Hollow, NY 10591

Summary

Process Development Engineer with over five years experience developing information-centric applications across multiple platforms from inception to launch. Focus on information systems integration, server side implementation of information visualization, code optimization to leverage new technologies and skillsets, and user interface design. Extremely self-motivated with high aptitude for learning new languages and platforms with minimal training or guidance.

Professional Experience

Regeneron Pharmaceuticals, Process Development Engineer - January 2013 to Present

- Project Lead of the "Paperless Lab Initiative" for the creation of an electronic and searchable record of all lab data and activity
  - Launched Microsoft OneNote application for collaborative editing—consistent with company security policies—as replacement of manual task-coordination process
  - Selected and standardized the use of tablets for in-lab data entry and visualization
  - Conceived, developed, and launched "Sampling Sheet" web application for data entry and the display of sample analysis results from LIMS as a replacement for paper records
  - Eliminated double data entry and reduced human data entry time by over 90%
- Charter member of "Central Data Management Team", a cross functional team dedicated to enabling data capture, retrieval and analysis, and improving data infrastructure
  - Work as a team to enforce best-practice in areas of data integrity and security consistent with company best-practices, and to identify optimal system for data storage and distribution
  - Principal contributor to internal Wiki web application, focusing on How-To's and User Guides relating to existing custom web applications
- Laboratory Information Management System (LIMS) Administrator
  - Defined process workflows for integration into scalable database architecture
  - Acquired advanced understanding of Oracle SQL Database architecture for LIMS in order to develop a middleware web application in ASP .NET translating queries into XML or HTML tables
- Representative for Cell Culture group within IT team responsible for department relocation and expansion
  - Designed network architecture for large lab space with over 80 devices; conceived scalable and infinitely flexible lab space with "agnostic" data ports to incorporate six private networks
  - Defined virtual LAN structure to create six private networks with an additional switch capable of replicating all private networks in case of failure
- Creator of and project coordinator for virtualization of in-lab data collection nodes
  - Worked with Data Center team to design VMWare vSphere Fault Tolerant cluster with a focus on redundancy and scalability
  - Wrote test protocols for all equipment and data collection devices

- Lead of “Automation Team”
  - Current project consists of re-writing “Sampling Sheet” web application to implement user-defined views, inputs and comparisons based on LIMS data structures; planned implementation of ASP .NET MVC architecture
  - Future efforts will focus on department-wide implementation of existing applications designed and developed as part of the “Paperless Lab Initiative”
- Responsible for Microsoft SQL Database for the storage of sample analysis results and associated metadata (e.g., QC and calibration results, configuration changes)
  - Developed Ruby script to parse flat-file data sources for integration with LIMS and SQL Database; revised script to incorporate multithreading and mutual exclusion; subsequently replaced with VB .NET script for translating XML data into SQL Database and flat-file output for LIMS

Regeneron Pharmaceuticals, Process Development Associate - June 2010 to January 2013

- Member of team developing manufacturing processes for therapeutic monoclonal antibodies using Chinese Hamster Ovary (CHO) cells
  - Independently conducted range-finding and nutrient-feed multivariate experiments in small scale bioreactors and shakers
- Administrator for OSIsoft PI Historian system, supporting data collection for eighty Sartorius bioreactors, ten Applikon bioreactors and nine NOVA BioProfile samplers
  - Developed “PI Site” website to display information related to equipment, allowing users to observe critical parameters remotely
  - Supported all associated network machines and hardware for lab data collection
  - Developed an Excel Notebook capable of automatically collecting and organizing offline sample analysis information, and arranging and graphing it to facilitate the comparison of conditions
  - Developed a unique remote volume-addition system and associated scheduler

Vaxinnate, Process Development Intern - May 2009 to August 2009

- Developed a high-nutrient media and feed procedure for creating recombinant proteins within bacteria, and operated bioreactors in a pilot plant scenario

Education

Rutgers, The State University of New Jersey, School of Engineering

Currently enrolled in part-time Masters Program, Masters of Engineering in Pharmaceutical Engineering and Science - Expected Graduation May 2017 (15 of 30 required credits completed)

Cumulative GPA: 4.0

Major in Biochemical Engineering with a Minor in Biology, Honors Program Class of 2010

Cumulative GPA: 3.52 Major GPA: 3.69

Skills

- Microsoft Windows; Microsoft Office Suite Expert; Microsoft IIS; Adobe PhotoShop Proficient
- VB .NET, ASP .NET, HTML, CSS, javascript, jQuery, ruby, git
- PC Hardware and Network Troubleshooting; IP/TCP Troubleshooting
- OSIsoft PI Historian administrative tools and associated products (DataLink, ProcessBook, PI Asset Framework SDK, etc.)

Hobbies

Building computers, kickball, microbrews, road-tripping