# Michael E. Ratliff 1309 Haybrook Drive Gahanna, Ohio 43230 (937) 554-7249 email@michaelratliff.com

# SUMMARY

An accomplished Computer Engineer with a Masters degree and experience specializing in application development. Extensive experience in software design processes, architecture, and application quality control. Strong expertise in creating web-based J2EE applications.

- Strong background in many areas including application development, operations support, business analysis, project management, and quality assurance.
- Strong experience in application development and design.
- Thorough knowledge of Java, web, and database technologies.
- Proven track record in seeing that all projects are seen to their completion meeting target dates and meeting or exceeding client expectations.
- Hard-working, dedicated, and fully committed to ensuring the highest standards of integrity at all times.
- Results-oriented, with an ability to see any project to successful completion.
- Works well with all levels of management and co-workers.
- A problem solver, able to find innovative solutions to tough problems.

Languages	Strong experience in Groovy, Javascript, and Bash Experience in Java, Rust, Perl, Lisp, Python, OpenGL, C, and Visual Basic
Tools and Technologies	Apache, Node, HTTP, TCP/IP, HTML, CSS, AJAX, JSON, Eclipse, SSL/TLS, Git, Docker, JUnit, JMeter, Grails, Ember, Google Cloud, Android, Linux, Unix, and microcontroller platforms
Databases	Oracle, MySQL, MS SQL Server, Postgres, SQLite, Access, and Excel
Methodologies	Agile, Scrum (Scrum.org Certified Professional Scrum Master)

## PROFESSIONAL EXPERIENCE

SPIDA Software, Gahanna, Ohio

Senior DevSecOps Engineer (October 2013 - Present )

- Created multiple custom enhancements and integrations to meet specific client needs.
- Assisted with creating Information Security policies and procedures and implementing security enhancements to bring cloud servers and networks inline with those policies.
- Responsible for migration of multiple deployments from on-premise to cloud.
- Developed SPIDAcee, an engineering-as-a-service platform capable of scaling to thousands of simultaneous jobs.
- Migrated SPIDAmin application to an Ember.JS frontend.
- Created a rules-based system for SPIDAmin to determine pole replacement deadlines.

## J.P.Morgan, Columbus, Ohio

Application Developer Lead (February 2011 - October 2013) Application Developer (March 2007 - February 2011)

- Responsible for development and support of a J2EE web-based global money market fund trading platform which processed \$2 billion worth of trades daily.
- Provide 24 hour 3rd-level support for global mission critical applications.
- Work with business users in the US, Luxembourg, and Hong Kong to identify and create application enhancements.
- Received Silver TORCH Award for implementation of online statements

## LexisNexis, Miamisburg, Ohio

Software Developer and Tester (August 2004 - March 2007)

- Developed a system for tracking testing of software projects, using two fat-client applications written in Visual Basic, which connected to an Access database using ADO.
- Created a tool using VBA to automate report generation from a bug tracking system, which made use of OLE Automation to interface with IE web components in order to automate data retrieval from the web-based bug

tracking system.

• Wrote several SQL queries for tracking performance of sales representatives.

## EDUCATION

*The Ohio State University*, Columbus, Ohio June 2005 Master of Science Degree in Computer Science and Engineering, specialization in Artificial Intelligence

*The Ohio State University*, Columbus, Ohio Bachelor of Science Degree in Computer and Information Science

June 2003

# SELECTED PROFESSIONAL PROJECTS

#### SPIDAcee (July 2017)

Created a system capable of scaling thousands of pole analysis jobs across hundreds of instances on Google Cloud. Technologies Used: Node, Docker, Java, Ember, Google Cloud

#### Pole Replacement Deadline Rules Engine (February 2014)

Created a system to determine deadlines for pole replacement. Distilled a set of complex pole replacement schedules into a set of rules. Created a rules engine to execute those rules. Technologies Used: Groovy, Oracle, Postgres

## RMB Fund Integration (May 2013)

Worked with client representatives in Hong Kong to integrate a Chinese transfer agent with J.P.Morgan's money market fund trading platform in order to allow clients to place trades on Chinese funds. Technologies Used: Java, Struts, iBatis, TLS, Sybase

#### Client Portfolio Analytics (January 2013)

Created a web-based analytics platform for our money market trading platform. This allows clients to analyze their fund holdings using interactive charts and graphs.

Technologies Used: Java, Javascript, CSS, iBatis, Struts, Highcharts, AJAX, JSON, Sybase

#### TexSTAR/LOGIC (July 2012)

Created a rebranded version of our trading platform for 2 Texas-based funds. For this project, we took over after a failed 9 month project by another firm. We were able to deliver in only 4 months a platform that exceeded the clients expectations. Technologies Used: Java, Javascript, CSS, iBatis, Struts, AJAX, JSON, Sybase

## Email Trade Confirmations (March 2012)

Created an enhancement allowing clients to receive an email when a trade has been placed on their account. Technologies Used: Java, SMTP, Javascript, iBatis, Struts, AJAX, Sybase

## Marketing Site Integration (August 2010)

Integrated our money market fund trading platform with the marketing site for those funds. This allowed clients to seamlessly switch back and forth between placing trades and viewing marketing materials and prospectuses. Technologies Used: Java, Javascript, CSS, AJAX

## Cross-sell CRM (January 2009)

Created a CRM application that integrated data from 3 separate lines of business in order to display one unified view of a client relationship.

Technologies Used: JSR 168 Portlets, Java, Javascript, CSS, iBatis, Sybase, Oracle

#### Online Statements (July 2008)

Integrated 2 online statement providers for US and International statements with J.P.Morgan's money market fund trading platform. This allowed users to retrieve past statements online and removed a huge workload from the client services team who had previously been faxing these statements to clients. Received J.P.Morgan's Silver TORCH award for this project. Technologies Used: Java, iBatis, Struts, XML, Webservices, Sybase

#### Dual-entry Trading (August 2007)

Enhanced a trading platform with dual-entry trade capability. This added another layer of security requiring one user to enter a trade and a second user to confirm the trade before it the trade was submitted. Technologies Used: Java, iBatis, Struts, Sybase

Test Tracker (March 2005) Created a fat-client application used to assign tests to users, track test completion, and generate reports showing test progress. Technologies Used: Visual Basic, Access, Excel

SELECTED PERSONAL PROJECTS

Online Mandelbrot viewer This was something I made to explore web workers. It creates a Mandelbrot fractal by doing the heavy computation in a webworker so that the UI stays responsive during the computation. http://michaelratliff.com/mand/mand.html

Javascript CPU Emulator of the Notch's DCPU16 (Fake CPU designed for a game that never happened) https://iammer.com/dcpu/dcpu16.html

Visualization of the Dragon Curve <u>http://michaelratliff.com/dragon.html</u>

Visualization of the Collatz Conjecture <u>http://michaelratliff.com/collatz/</u>

April Fools Day Prank https://calc10.iammer.com/

Scripts for configuring a my development environment quickly on any machine <u>https://github.com/iammer/dotfiles</u>

CLI clone of 2048 written in Rust <u>https://github.com/iammer/combine\_k</u>

Mandelbrot generator written in Rust <u>https://gitlab.com/iammer/mand</u>

Joke twitter clone with a 3 character limit <u>https://github.com/iammer/twit</u>