

# RICHARD 'KALE' SIPES

## EDUCATIONAL ACHIEVEMENTS

---

**Cheney, WA** **Eastern Washington University** **Fall 2013 – present**

- M.S. in Computer Science, Expected Summer 2016
  - Thesis in progress: "Using convolutional neural networks for fine-grained image classification of human white blood cells." Python, Octave. Related coursework: Machine Learning, Algorithms, Data Science.
  - Machine Learning by Stanford University on Coursera. Certificate earned April 2016.
  - Data Manipulation at Scale by University of Washington on Coursera. Certificate earned May 2016.
- B.S. in Biochemistry, June 2010
  - First Author: "Evidence that aberrant protein metabolism contributes to chemoresistance in multiple myeloma cells," Oncology Reports, e-published March 2012.

**Spokane, WA** **Providence Sacred Heart** **June 2011 – June 2012**

- ASCP Board Certified Medical Technologist, June 2012
  - Yearlong internship. Evaluated by laboratory staff as being professional and pleasant to work with.

## TECHNICAL PROJECTS

---

- **QuickDraw Phlebotomy Support Tool** (2016). Automated extraction of online medical test data for visually mapping tests to specimen collection containers thereby reducing human errors. AWS, DynamoDB, JSoup
- **Personal Website** (2016). Visit [studentweb.ewu.edu/rsipes34](http://studentweb.ewu.edu/rsipes34) for visual resume. HTML, CSS, JavaScript
- **NoSQL Comparison** (2015). Implemented MongoDB and Neo4j databases using 10<sup>6</sup> crime records. Optimized query execution through indexing and schema design. Java, JSON, Cypher
- **Maze Generator** (2014). Developed depth-first search maze generation algorithm and SQLite database for an over head game displayed using java.awt package. Java, SQLite

## LANGUAGES AND TECHNOLOGIES

---

- Java (proficient); Python, C, Octave (intermediate); R, HTML, CSS, JavaScript (novice)
- MongoDB; DynamoDB; Neo4j; SQL; JSON
- Eclipse; XCode; Git

## WORK ACHIEVEMENTS

---

**Graduate Assistant** **Eastern Washington University** **Fall 2014 – Spring 2016**

- Taught Microsoft Office, computer literacy topics, and HTML/CSS to 50+ college students quarterly.
- Earned positive student reviews: "Is a great teacher." "You can tell he cares about his students."

**Summer Instructor** **Girls Who Code** **July 2015 – Aug. 2015**

- Delivered an intensive 7 week course covering computer science principles, algorithms, data structures, robotics, security, HTML/CSS/JavaScript and Python to 20 high school students at Microsoft, Redmond.
- Evaluated student progress through pre and post program surveys revealing an average 35 point gain.
- Teamed with two teaching assistants to promote group bonding and an encouraging atmosphere.

**Medical Technologist** **Providence Medical Group** **Aug. 2013 – Sept. 2014**

- Independently ran stat hematology, chemistry and urinalysis testing for an urgent care clinic.
- Updated and wrote manager approved laboratory procedures for hematology and toxicology screening.

**Medical Technologist** **LabCorp** **July 2012 – June 2013**

- Performed routine chemistry analysis without correction for a high-volume lab serving thousands daily.
- Recognized by customer service for prioritizing and promptly responding to urgent customer inquiries.

## ADDITIONAL EXPERIENCE AND AWARDS

---

- Awarded 2010 Outstanding Chemistry Graduate; EWU Chapter Circle K International Treasurer 2007-09