

# MATHIAS RICKEN

mgricken@gmail.com

(713) 568-6852

## EXPERIENCE

**Consulting Member of Technical Staff**, Oracle Software, Seattle, WA, Mar 2017 – Developing reliable, efficient, and easy to use SDKs and CLIs for Oracle’s cloud. (Principal Member of Technical Staff: 2017-2020)

**Senior Software Engineer**, Tableau Software, Seattle, WA, Dec 2015 – Mar 2017 Working at the intersection of Tableau’s two most important projects: Developing a Linux server, and creating an improved, scalable server infrastructure and interface.

### **Senior Software Development Engineer**

Amazon.com, Seattle, WA, Jan 2011 – Dec 2015

- Extending and simplifying the Subscriptions platform, backbone of programs like Prime and Kindle Unlimited, by adding plug-in concepts and self-service web UIs.
- Converting the Kindle bookstore storefront to a server-side-rendered website correctly displayed on diverse hardware.
- Automatically detecting and rolling back deployments of faulty code.
- Responsive client-side web UI for self-service configuration of anomaly detection, including graphical display of past data and anomalies.
- Automatic modification of anomaly detection configuration based on user-supplied constraints.
- Anomaly detection service for numerical time-series data, consuming live metrics from thousands of distributed servers. Live migration from old service to scalable new service without downtime.
- Live migration from old service to scalable new service without downtime.

**Instructor**, Production Programming, Spring 2009, Rice University

**Instructor**, Principles of Object-Oriented Programming 2, Fall 2008, Rice University

## PATENTS

### **Integration based anomaly detection service**

US PTO 9015536, 9015536, and 10216560.

Detecting resource usage anomalies in a cloud computing environment.

## EDUCATION

**Ph.D. in Computer Science** May 2011, Rice University, Houston, TX

Thesis: “A Framework for Testing Concurrent Programs”

Research Area: Programming Languages. Advisor: Dr. Robert Cartwright

## PUBLICATIONS and PRESENTATIONS (selected)

### **Agile and Efficient Domain-Specific Languages using Multi-stage Programming**

Ricken, M., E. Westbrook, and W. Taha. *GPCI 2010*

### **Mint: Java Multi-stage Programming Using Weak Separability**

Westbrook, E, M. Ricken, J. Inoue, Y. Yao, T. Abdelatif, and W. Taha. *PLDI 2010*

### **ConcJUnit: Unit Testing for Concurrent Programs**

Ricken, M., and R. Cartwright. *PPPJ 2009*

### **Design Patterns for Parsing**

Nguyen, D., M. Ricken, and S. Wong. *SIGCSE 2005*