

# Seth Lakowske

lakowske@gmail.com

## OBJECTIVE

- Obtain a position designing and developing software systems.

## EXPERIENCE

- **Thermo Fisher Scientific, 2017 - 2021**

Created a service mesh to secure service-to-service communication with Istio. Deployed and managed a logging and monitoring framework consisting of Fluentd, Elastic Search, Kibana and Prometheus. Researched multiple API gateways to route requests to services.

- **Core Informatics, 2016 - 2017**

Lead a technical team creating a microservice architecture to expand the company's ability to grow into a more reliable and extensive environment. Investigated cluster software Apache Mesosphere and Kubernetes to host microservices. Converted legacy applications to Docker images running inside Kubernetes. Acquired by Thermo Fisher Scientific.

- **Mandli Communications, 2008 - 2016**

Created an automated road sign detection algorithm using OpenCV to replace manual road sign input. Developed a road sign retro reflectivity product using Weka that is an innovation in the transportation industry. Developed a method to model arbitrarily complex sensor placements on new road collection vehicles. Researched a pavement distress detection technique using grayscale images of the road. Developed OpenGL based tools to inventory road assets.

- **Ohigo Inc. , 2005 - 2008**

Managed a team of developers that built a music search engine. Used Mel Frequency Cepstrum Coefficients (MFCC) and a decision tree to categorize music by genre. Applied for a patent on this technique (Application #20080249982). Used Solr search engine to query a database of music knowledge. Created a game, Music Streaker, using small cash rewards to generate music knowledge.

## EDUCATION

- **University of Wisconsin, Madison.** Completed a BS at the Department of Computer Sciences in May, 2005.

## SKILLS

- Containerization with Docker and Kubernetes
- Extensive experience with Java, Spring and IoC
- Vision Programming using JavaCV, OpenCV and ImageIO
- Machine Learning using Weka
- Database Programming, SQL, JPA and JPQL
- Experienced with C, C++, Python, PHP and Matlab
- Development with gcc, gdb, make and associated tools
- Comfortable on GNU/Linux, OS X and Windows operating systems

## TECHNICAL INTERESTS

- Machine Learning and Artificial Intelligence
- Computer Vision
- Generative AI

## REFERENCES

- Available upon request