

**Phillip A. Kahrl**  
**Software Engineer, Technical Leader, Writer**  
phil.kahrl@gmail.com (602)-427-8034  
<https://www.linkedin.com/in/philkahrl/>

## Summary

Highly-experienced software engineer and technical manager, with experience in consulting, government and big tech sectors. Recently I have been focused on working with early-stage companies and entrepreneurs in building teams and innovating on new products.

## Areas of Expertise

**Full Stack Development** with JavaScript, React, Node.js and related technologies.

**API Design and Development** using Java and Node.js

**Cloud Architecture and System Design** using AWS and GCP.

**Data Pipelines** using AWS EMR, AWS RedShift and related technologies.

**Writing** articles on software development and mentoring engineers.

## Public Portfolio

**Inventions:** [US Patent 10,789,619](#) Advertisement metric prediction.

**Weblum:** <https://weblum.photos> - Online store and progressive web application for privacy-oriented photo sharing and social networking. Built using React, Node.js and AWS serverless technologies.

**Medium:** <https://medium.com/@voiceofreason3141>, writing on software development.

**GitHub,** <https://github.com/phil-kahrl>, open source projects and code examples.

**Tom Swifty:** [https://www.amazon.com/phil\\_kahrl-Tom-Swifty/dp/B07BR14GVL](https://www.amazon.com/phil_kahrl-Tom-Swifty/dp/B07BR14GVL). A voice skill built on the Alexa Skills Kit.

## Recent Experience

### August 2018 - Present

#### Lead Engineer at Viewpath

Reporting directly to the CEO, responsibilities included building a new engineering team and SaaS product for Project Management space as well as maintaining and enhancing existing SaaS products. In addition to being a technical IC, responsibilities included recruiting, hiring, managing and mentoring engineers, product development, technical writing and communications with the investment board. Technologies used included legacy platforms on .NET and Java runtimes and new software built on top of a React/Node.js toolchain on the

Google Cloud Platform.

## **May 2018 - August 2018**

### **Founder and Principal Engineer at Cathexis LLC**

Built Weblum, a privacy-oriented application for sharing photos and content. Built an online store and infrastructure to provision individually hosted applications on demand. All applications and infrastructure are built on top of AWS serverless infrastructure (AWS Lambda, API Gateway and S3) in order to deliver scalable, maintainable applications at low cost. Principal in all areas of launching a new product and company from product development and infrastructure design to legal and marketing.

## **August 2016 – May 2018**

### **Senior Software Engineer, Segment Modeling Team, Quantcast.**

Developed web applications for audience insights which let advertisers and publishers understand their customers, gain insights and make data-driven decisions for advertising. Technologies used include ReactJS, Node, Angular, CSS3 and HTML5. Developed patterns and frameworks for re-using features across applications. Contributed to system architecture and implementation for exposing large data sets through a REST API. Design and assessment of big data technologies including AWS EMR and AWS RedShift. Involved in all aspects of recruiting and mentoring in building out a new team.

## **November 2013 – August 2016**

### **Software Engineer in Amazon Fulfillment Item Data Quality Team**

Responsible for all weights and dimensions of 100 MM+ physical items in the Amazon catalog that are fulfilled by Amazon. My work included building a team and re-engineering legacy software systems in C++ and Oracle to data pipelines Java web services. Built new web applications using Ruby on Rails, Tomcat and AngularJS. I designed and built a data pipeline centered on AWS RedShift along with a business intelligence portal. The new systems that I built allowed new means of automatically detecting and correcting item measurements resulting in cost savings in a variety of processes as well as shipping charges. I also implemented machine learning models to predict item measurements in order to save labor and allow for items to be shipped sooner after being received without the need for manual labor.

## **November 2011 – November 2013**

### **Software Engineer on the Amazon Kindle Ad Products Optimization team**

Built a prediction and delivery control system for the unique problem of managing cost per thousand Impression (CPM) delivery of ads to intermittently connected devices. This project involved extracting population characteristics out of large data sets, statistical modeling and building a scalable, real-time, low latency web service.

Worked on the development of new ad products for Kindle devices as well as the internationalization of existing ad products. Involved in design and planning for long-term solutions for managing forecasting, ad delivery and metrics for Kindle devices. Built custom in-house tools for use by traffickers and account managers in order to improve the quality of ad campaign execution.

## **October 2008 - November 2011**

### **Software engineer on Amazon Display Advertising team**

I was involved in all aspects of building a fledgling display ads program into a multi-billion dollar international business. My work involved both front-end and back-end systems that need to work at high volume with extremely low latency.

I was the sole developer responsible for designing and building an ad feedback system that is instrumental in maintaining a good customer experience while satisfying the needs of advertising customers.

Throughout my time in display ads I worked as an individual contributor as well as a technical lead and liaison with business customers.

## **June 2006 – June 2009**

### **Consulting Software Engineer**

Consulting Software Engineer in the consulting branch of Net Objectives which spun off to become Velocity Partners. Clients included Real Networks, Amazon.com, and the Walt Disney Internet Group. I wrote an encryption key distribution system that is currently in use to encrypt session cookies on ABC.com, ESPN and other web domains owned by Walt Disney Corporation. I was also responsible for numerous improvements to Product, Browse and Gateway pages on Amazon.com.

## **Other Experience**

### **1997 – 2006**

#### **Server Application Consultant**

Developed server applications for numerous clients across the nation. My clients included Fortune 500 companies such as Chevron, PriceWaterhouseCoopers as well as US Department of Defense and financial institutions. My work generally involved developing client server and web applications used for business processes and knowledge management. I was often the sole developer responsible for start to end delivery of projects from requirements definition all the way through to production release and maintenance.

### **1993 – 1997**

#### **Surface Warfare Officer, United States Navy**

Responsible for supervising up to 20 personnel in the maintenance of millions of dollars worth of shipboard equipment including electronics, mechanical and electrical equipment  
Assumed the highest level of responsibility and reported directly to the commanding officer for complex operations involving multiple ships and aircraft in potentially hazardous situations.

## **Education**

## **University of California, Davis**

**Master's of Science, Mechanical Engineering**, specializing in Robotics and Control Systems.

3.70/4.0 GPA.

## **Rensselaer Polytechnic Institute,**

**Bachelor's of Science, Mechanical Engineering**

3.75/4.0 GPA, Summa Cum Laude

## **Professional Certification**

Sun Certified Java Programmer for the Java 2 Platform

Principal Certified Lotus Professional (PCLP) for Domino Application Development

## **Open Source Contributions**

Primary Architect and Programmer for RealWorkFlow- a workflow engine written in Java for the IBM Lotus Domino server available on <http://www.openntf.org/>

Primary Architect and Programmer for Notes Music Station - an MP3 library and tag editor for your IBM Notes mail client available on <http://www.openntf.org/>