

# TREVOR SUMMERS SMITH

hello AT trevorsummerssmith.org  
Cedar, MI

Driven technologist and leader with a proven track record of delivering complex solutions. An agile and adept learner who prizes teamwork, ownership, accountability, transparency and humility.

## WORK EXPERIENCE

### **February 2015 - Present** *VP Engineering, Arena*

In charge of all technological direction and execution for Arena's hiring recommendation platform. Arena uses a variety of data sources to recommend 'best-fit' candidates to achieve organizational outcomes such as increased tenure. Arena's platform internally is built upon Amazon Web Services (EC2, S3, RDS, DynamoDB) in OCaml.

- Prioritize product roadmap, budget and hiring plan, to grow technology organization at an early stage startup.
- Enable Data Science team to rapidly incorporate new data streams, experiment with new modeling styles, so as to increase the effectiveness of the core product and support new product features.
- Full administrative management responsibilities for team; grew technical organization from size zero to 15, during first year.
- Work cross functionally within senior management to deliver and iterate on Arena's go to market strategy and product direction.
- Responsible for information technology organization.

### **May 2011 - February 2015** *Director of Platform, Engineering Lead, Engineer, Knewton, Inc.*

Lead the team responsible for building and scaling Knewton's highly available infrastructure that analyzes millions of student data in real-time to provide recommendations and analytics. The Platform is built on Amazon Web Services (EC2, S3, RDS, DynamoDB) in Java. The Platform internally provides an event-sourced view of the student interaction history, user management and horizontally scaling graph database.

- Chief Architect for Platform.
- Established code and design review, unit and integration testing standards across the organization.
- Led the organization from a single monolithic codebase to a horizontally scaling, highly available service-oriented-architecture.
- Working cross functionally, established *The Knewton Creation Process* – a description of the lifecycle of how we develop, support and create products at Knewton from business need, prototyping, beta-rollout, to full production launch and marketing.
- Partnered with Recruiting organization, developed extremely efficient processes minimizing opportunity costs and growing the team from 15 members in technology to over 100.
- Responsible for planning, budget and deliverables for the Platform team (30 members) as well as technical and product direction for our Platform API business.
- Full administrative management responsibilities for team.

### **May 2010 - May 2011** *Founder and Engineer, Animal Sensor Design*

Developed *bear collar*: wild life tracking collar that measured the location and movement of large mammals such as bear, deer, elk, etc. These measurements are used by wildlife researchers to determine wildlife corridors for highway planning, animal control and research.

- Worked with wild life researcher to define product needs that included: 1 year battery life, survival for 1 year of the elements with a temperature range of -12C to 40C, and 2lb weight restriction.
- Developed innovative design that used SMS to transfer the collar data, which reduced cost and data transmission latency by an order of magnitude. Competitors at the time either required the collars to be retrieved to get the data, or transferred over costly satellite networks.

### **September 2007 - February 2009** *Architect, Developer and Team Leader, Vonage, Inc.*

Lead developer for the real-time audio servers that routed all calls in the Vonage network.

- Lead developer on RTP (Real-time Transport Protocol)/RTCP (Real-time Control Protocol) servers, a core component in routing all phone calls in the Vonage network.
- Developed and managed the creation and support of functional, unit and load testing for the RTP/RTCP servers.

- Technical liaison for call quality initiative. Prepared updates to present at monthly meetings; translated highly technical information into more accessible reports. Responsible for communicating technical issues behind accomplishing quality goals.
- Lead architect and developer of call quality servers used to gather statistics on the audio quality of every phone call of the 2.6 million Vonage users.
- Coordinated the implementation of several projects with the Quality Assurance and Production teams. Managed new features and release dates. Reviewed all progress and gave feedback to appropriate groups.

**March 2004 - September 2006** *Research Assistant, University of Chicago Computer Science Department*

- Identified and investigated relevant current research in computer vision.
- Implemented complex algorithms using theoretical knowledge from Discrete Math, Statistics and Algorithmic Theory.

## EDUCATION

**University of Chicago** Chicago, IL  
Pursued B.S. in Computer Science  
2003 - 2007  
GPA: 3.16 / 4.0

## SKILLS & INTERESTS

- Experience with Java, Python, OCaml, C, C++, SML, Perl, Bash shell scripting, XML, XHTML, CSS, JavaScript, SQL, Ruby, PHP; x86, SPARC and Atmel AVR ASM.
- I have created and supported production systems with active user bases in the millions in C, Perl, Python and Java. I am an extremely fast learner and pick up and leverage new technologies quickly.
- I meditate and exercise daily.