

# Joshua Chaitin-Pollak, Lead Software Engineer

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## SUMMARY

I enjoy being a hands-on technology leader and am passionate about designing flexible software, managing complex projects and creative problem solving. I have over fifteen years of experience developing applications, defining and managing strategic objectives, and planning tactical roadmaps.

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## EXPERIENCE

### **6 River Systems, Member of Technical Staff**

October 2015-current

<http://6river.com>

- o 6 River's mission is to redefine fulfillment automation for e-commerce and retail operations
- o Responsible for high level system architecture and implementation of a multi-robot system including business features such as resource allocation, server infrastructure, etc
- o Help define engineering process and tool suite, product roadmap, and technical vision.

### **Assured Labor, Chief Technology Officer**

February 2012-September 2015

<http://assuredlabor.com>

- o Assured Labor brings modern mobile technology to low-wage recruiting in emerging markets.
- o Worked with CEO, COO and other members of an international management team to plan company strategy and product development of our web and mobile recruiting platform.
- o Responsible for technological vision, product roadmap, software architecture, and engineering process.
- o Lead multi-national distributed team of engineers working with Java, Spring, AngularJS and many cloud-based services.
- o Personally implemented major features in a variety of technologies.
- o Transitioned the product to a REST based MVC model using multiple Spring backend services and multiple front end interfaces.
- o Designed the system with scalability, reliability, and internationalization/localization as our top priorities, leveraging modern web development technologies to provide recruiting services via the web, mobile devices, and SMS.
- o Established a scrum-based development cycle and set up institutionalized processes such as unit testing, continuous integration, continuous deployment and code reviews.
- o Set up SDLC automation so developers can be productive and familiar with the development process on their first day.

### **Kiva Systems (now Amazon Robotics), Software Architect & Team Lead**

<http://kivasystems.com>

February 2005-February 2012

- o Kiva Systems brought autonomous mobile robotics to warehouses and distribution centers. It was acquired by Amazon in 2012 for 775mm.
- o Development Lead for a team of software engineers implementing major features, including the use of multi-level storage (i.e., robots riding elevators), 'deep' storage, quarantine zones, an asset management framework and others.
- o Designed and implemented the embedded Linux system used by the robots, implemented much of the core architecture and job processing logic.
- o Responsible for our support framework, maintaining our build system, and implementing our initial high-availability clustering solution.
- o Participated in deployment, customer support and internal IT roles.

**Charles River Analytics, Software Engineer**

December 2001-February 2005

<http://cra.com>

- o Developed VisionKit, a cross-platform computer vision library written in C++ and the STL.
- o Performed computer vision research on a variety of topics for SBIR contracts including surveillance of pedestrians at night, improving OCR quality of damaged documents, etc.

**Swatchbox Technologies, Software Engineer**

June 2001-October 2001

- o Developed photo-realistic visualization software targeted at homeowners and contractors.
- o Wrote a software engine for realistic editing and visualization of objects within still photographs.

**Trakus Technologies, R&D Software Engineer**

June 2000-September 2000

- o Developed an experimental computer vision solution to track hockey players as they skated around an ice rink. When lacking source data, used recordings of a video game as input data.
- o Worked on a solution to compute the trajectory of a gold ball from a single frame of video on a commodity video camera, using a rapid firing infrared strobe flash.

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AWARDS

**2000 Robocup World Cup Champions - Small Size League**

September 2000

- o I built the computer vision system for the Cornell University robotic soccer team, which won the world cup in 2000.

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EDUCATION

**Cornell University**

January 2000-December 2000

Master of Engineering - Computer Science

**Cornell University**

September 1995-May 2000

Bachelor of Science - Computer Science

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SKILLS

**Software Engineering:** JavaScript, TypeScript, Google Cloud, Java, C++, Node, AWS, Cloud Computing, Scala, Clojure

**Team Leadership:** Agile, Scrum, TDD, BDD, Continuous Integration & Deployment

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INTERESTS

Photography, Travel, Motorsports