



# Karl Hill

SENIOR FULL STACK SOFTWARE ENGINEER

## Summary

Senior technology leader with over 20 years of experience spearheading, developing, and deploying Agile solutions. Exhibits proficiency in client engagement, comprehending requirements, and delivering solutions. Proficient in full-stack engineering, working across diverse industries. Known for strategic planning, team leadership, and a commitment to staying abreast of the latest trends and technologies.

## Professional Experience

### Sr. Software Engineer, Science Systems and Applications, Inc (SSAI), Lanham, MD

DECEMBER 2017 – PRESENT

- Overhauled earthobservatory.nasa.gov, a public, high-traffic website with roughly 1.5 million monthly hits, enhancing performance, usability, and SEO.
- Implemented cloud solutions, increasing application scalability and performance by 40% in 6 months.
- Redesigned NASA Earth Observatory's Laravel-based internal admin systems, increasing functionality by 100% and reliability by 50%.
- Spearheaded an automated content registry, improving data collection by 60%.
- Guided software teams through Scrum ceremonies and agile best practices, enhancing team efficiency and project delivery.
- Collaborated with teams to ensure the smooth integration of new features.

### Sr. Software Engineer, InformedDNA, St. Petersburg, FL

JANUARY 2016 – DECEMBER 2017

- Architected a Laravel-based case management application for healthcare professionals, including UI/UX design, saving \$30K in extra expenses.
- Engineered CRM enhancements, improving customer service and contributing 15% to revenue growth.
- Introduced custom APIs, eliminating 3 DB instances and optimizing DB usage.
- Managed system upgrades and maintenance, bolstering security and system availability, resulting in a twofold decrease in security incidents.

### Sr. Software Engineer, Ticomix, Inc., Washington, D.C.

JUNE 2012 – MARCH 2015

- Crafted SugarCRM applications for 20+ clients (VDOT, Redskins, Kastle), leading to an increase in efficiency and productivity across sales departments.
- Reduced defect backlog from hundreds to 25 at launch, enhancing product quality and customer satisfaction for a premier client.
- Created an application to assist companies in identifying business opportunities.
- Collaborated in a 10-person distributed team, demonstrating strong remote working capabilities.

### Software Engineer, Sabre Corporation, Bethesda, MD

JULY 2010 – JUNE 2012

- Built and optimized PHP applications for 5 top global travel clients, improving customer satisfaction and overall user experience.
- Translated client needs into detailed technical specifications, guiding the development of customized solutions aligned with client objectives.
- Boosted advertising revenue through data-driven collaboration with marketing.

## Details

Washington, DC, 20011

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## Links

<https://www.linkedin.com/in/khill/>

<https://karlhill.com>

## Skills

Agile Methodologies

Team Leadership

SDLC Processes & Execution

Object-Oriented Design

Test-Driven Development

Technical Problem Solving

Cloud-Native Solutions

UX / UI Development

Stakeholder Engagement

Cross-Functional Collaboration

- Mentored junior developers, fostering an environment of continuous growth and skill enhancement.

## Principal Software Engineer, Dante Inc., Arlington, VA

MAY 2007 – JUNE 2010

- Developed Java solutions using open-source technologies for high-profile clients (=like Comcast and Mastercard, enhancing operational efficiency.
- Played a pivotal role in a Scrum team, delivering key features and conducting thorough tests for optimal performance.
- Regularly performed unit and acceptance tests for near-perfect software.

## Sr. Software Engineer, Visitar, Inc., Reston, VA

JANUARY 2006 – FEBRUARY 2007

- Collaborated on a Java-based telephony application with Asterisk integration, enhancing SugarCRM with features such as ACD, call routing, web-based IVR, and voicemail, resulting in an improved customer service experience.
- Engineered a CRM telephony component using Flash/ActionScript, optimizing call management and handling over 1000 daily customer interactions.
- Rapidly identified and resolved technical issues, maintaining smooth operations and achieving a 99% reduction in system downtime.

## Software Developer, Verizon Business, Herndon, VA

NOVEMBER 1999 – MARCH 2005

- Instrumental in building NetSec's managed security-services platform, Finium, leading to a tenfold increase in client engagements, a prestigious presentation at Gartner and MCI's posthumous acquisition of NetSec for \$105m.
- Key contributor to a 7+ person Java agile team, transitioning from initial XP and waterfall methodologies to Scrum, leading to increased quality.
- Developed Finium's internal admin systems using PHP and Java, while adhering to best coding practices and design patterns.

## Education

BS, Computer Science coursework, University of Maryland

AA, General Studies, Howard Community College

## Certifications

Certified ScrumMaster (CSM), Scrum Alliance

Project Management, Rutgers University

## Skills

**Languages:** PHP, Java, Perl, Python, SQL, JavaScript, HTML/CSS, Bash

**Frameworks:** Laravel, Tailwind CSS, Bootstrap, Livewire, PHPUnit

**Platforms:** WordPress, Drupal, Amazon Web Services (AWS), Docker, LAMP

**Tools:** PHPStorm, Git, GitLab CI/CD, NPM, Composer, Apache, Nginx, Vite, Jira

**Storage:** MySQL, MariaDB, PostgreSQL, Oracle, SQL Server, JSON, Elasticsearch

**Libraries/APIs:** jQuery, REST APIs, Node.js