

Dustin Sparks

Lead Software Engineer | AI Agents, Applied AI, and Production Systems

I build production AI systems that connect language models to tools, application services, business rules, and human workflows.

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Summary

Lead software engineer on a healthcare product, building assistants for members, clinicians, and health coaches, and the clinical, insurance, and billing services around them. That includes a member assistant in daily use, a churn model that informed retention decisions, clinical note drafting, and prior-authorization and visit workflows, including registered dietitian care. Earlier, led front-end teams on enterprise platforms for Fannie Mae, Swiss Re, Lowe's Canada, and others. M.S. in Computer Science (Artificial Intelligence), Georgia Tech.

Professional Experience

Found

Remote

MARCH 2023 – PRESENT

Lead Software Engineer

Lead for applied AI on a healthcare product. Shipped assistants for members, clinicians, and health coaches. Built a churn model that informed retention decisions, and drafting support so clinicians can review and edit clinical notes. Also built insurance, prior-authorization, and visit workflows, including the systems behind registered dietitian care, a new line of business.

APRIL 2022 – MARCH 2023

Senior Software Engineer

Rebuilt account creation and onboarding, including unfinished registrations. Built subscription management across web checkout and the mobile app stores, and shipped a public health-assessment quiz.

EPAM Systems

Remote

JULY 2015 – APRIL 2022

Lead Software Engineer

Led front-end teams of 4–8 engineers on enterprise platforms in insurance, financial services, housing finance, healthcare, and commerce: hiring and staffing teams, planning work and architecture, and designing API contracts between front end and backend. Built in Angular, React, and Sitecore (.NET). Also mentored 50+ engineers and ran nearly 200 technical interviews.

Georgia Tech Professional Education

Savannah, GA

JANUARY 2017 – JULY 2019

Adjunct Instructor

Taught a 6-month full-stack bootcamp. Students started without a code editor and left able to build MERN applications. The course covered Git, Node, Express, Mongo, MySQL, jQuery, React, and C#.

NavigationArts

Remote

JANUARY 2015 – JULY 2015

Lead Front End Developer

Led an international team on large responsive corporate sites, web apps, and mobile apps, including healthcare and education sites. Owned architecture, component libraries, continuous integration, and mentoring across levels.

BFG Communications

Hilton Head Island, SC

DECEMBER 2012 – JANUARY 2015

Lead Developer

Ran senior and junior developers across brand sites and interactive campaigns at the same time. Staffed work to people's level, and set the front-end and back-end frameworks the team built on. Several of those campaigns were engines that let designers and artists make content without a developer: a quiz engine, a racing engine with a map editor, a tree-traversal engine, and an HTML engine built to move the work off Flash.

JANUARY 2012 – JUNE 2013

Senior Interactive Developer

Built Flash for web and mobile, rich interfaces in JavaScript, HTML, and CSS, and back-end services in PHP and .NET. Also worked in Unity, Ruby, and Node.

JUNE 2011 – JANUARY 2012

Flash Developer

Actionscript and Flash for national manufacturers, plus JavaScript, HTML, and CSS interfaces. Supported that work with PHP and MySQL.

Vision 3

Indianapolis, IN

OCTOBER 2010 – MARCH 2011

Interactive Developer

Led interactive builds in Flash, Unity, and Xcode, using Actionscript, JavaScript, C#, and Objective-C. Delivered 3D product presentations for a faucet company and a multi-touch walkthrough of a helicopter engine assembly line.

Ball State University

Muncie, IN

JUNE 2009 – OCTOBER 2010

Multimedia Developer, Emerging Technologies

Research and development on iPhone, Android, and mobile Flash, plus augmented reality, HTML5, CSS3, and games in Unity.

NOVEMBER 2007 – MAY 2009

Interactive Media Master, Digital Corps

Built Mac OS X widgets, including a library card catalog, plus AJAX, PHP, MySQL, and Flash applications. Also made information kiosks and multimedia display boards.

AUGUST 2007 – JUNE 2008

Interactive Developer, Digital Corps

Experimental interactive projects, and workshops for students who had not built interactive work before.

MAY 2007 – AUGUST 2007

Undergraduate Research Fellow

Built an Actionscript app that let people draw over streamed video in real time, save it, and play the drawing back with the video. Also designed interactive television interfaces.

JANUARY 2007 – MAY 2007

Interactive Media Specialist

Video editing, web design, and dynamic sites for the Center for Media Design, including research sites for NBC Universal.

2005 – 2006

Graphic Designer, Center for Media Design

Graphics for sites, presentations, and installations. Coded and styled site designs that were then loaded into the university content system.

MediaSauce

Carmel, IN

APRIL 2008 – AUGUST 2008

Interactive Developer

Internship on a LAMP stack: PHP, MySQL, JavaScript, HTML, and XML, plus Flash with Actionscript 2 and 3. Design work in Photoshop, Illustrator, After Effects, and Maya. Center for Creative Leadership and PooYou came out of this studio.

Freelance

2016 – 2018

Interactive Developer

Multi-year solo engagement for Aprima, alongside a full-time role. Built the site on WordPress (HTML, CSS, and jQuery front end, PHP and MySQL back end), then stayed on in a support role, fixing issues and building new page templates and landing pages.

MAY 2004 – MARCH 2010

Interactive Designer and Developer

Websites, applications, and widgets for Warner Brothers Records, Blue Cross Blue Shield, Garfield, Tracfone, the Indiana Pacers, and the Indy Racing League.

Education

Master of Science in Computer Science, Artificial Intelligence

Georgia Institute of Technology, 2022

Bachelor of Arts in Multimedia Telecommunications and Computer Science

Ball State University, 2005–2009

Skills & Tools

AI and Agent Systems

Production AI assistants, clinical documentation, retention models, and healthcare operations. Daily work uses AI coding agents. The next role is training agents, not only prompt-backed apps.

Languages and Backend

JavaScript, TypeScript, Python, NodeJS, Express, NextJS, MongoDB, MySQL, Postgres, OpenAPI, and contract-first API design

Frontend and Mobile

React, Angular, Sitecore (.NET), React Native, Flutter

Platforms

AWS, Docker, Heroku, CI/CD

Collaboration

Cross-functional team leadership, technical mentorship, interviewing, performance reviews