

Contact

+31638193933 (Home)
flarecore@gmail.com

www.linkedin.com/in/aramudanni
(LinkedIn)

Top Skills

Linux
PHPUnit
Subversion

Languages

Tamil (Native or Bilingual)
English (Native or Bilingual)

Honors-Awards

UTG Llama Award for Q3 2021

Raj Aramudan

Staff Software Engineer | Applied AI | AI Transformation | Forward
Deployed Engineer | Zero to One
Amsterdam, North Holland, Netherlands

Summary

Most software is needlessly complicated because organizations are afraid to make simple decisions. I spend my time stripping away the noise and building systems that actually work. I engineer for commercial reality rather than procedural comfort. I judge what is achievable by the state of the art of the platform, not the limitations of a local framework. If a capability is technically possible, I find a way to bring it to life—or engineer the closest viable path to secure the business outcome. I have spent fifteen years designing and shipping software from the bare metal to the interface. Early on, I built an open-source email marketing engine in raw PHP and MySQL. It was downloaded over 150,000 times and ran on 40,000 production servers around the globe. When funded commercial competitors began writing tools specifically to import my database schema, I learned what real traction looks like—and what it costs to sustain an engine alone. At ThoughtWorks, I operated as a forward deployed engineer across global management consultancies and enterprise publishers. Clients often called me in to patch a broken user interface. Inevitably, the interface wasn't the problem; the thinking behind it was. My job was to bypass the committees, build working prototypes in days rather than months, and establish clean technical contracts that protected the engineering teams from shifting requirements. Today, I build production-grade agentic AI systems and autonomous software architectures from Amsterdam. The tools have evolved, but the underlying discipline has not: verify before you trust, keep the dependencies lean, and design systems that non-technical leaders can understand and engineers can maintain. Based in Amsterdam. Open to forward deployed engineering, technical advisory, and zero-to-one architectural challenges.

Experience

Self Employed

Independent Applied AI Systems Researcher

January 2026 - Present (10 months)

Amsterdam Area

Research and development: Experimenting with open-source language models to solve the cost, potency, and reliability problems of GenerativeAI:

- Negative space prompting
- Distillation of expensive LLM calls to notational calls in Llama 8B/3B
- Deterministic projection of context into body of knowledge
- Deterministic synthesis of mathematically justifiable and auditable judgments over proprietary legal corpora
- Progressive logic distillation: Systematically compiling probabilistic LLM reasoning chains into deterministic edge machine code, progressively deprecating the need for live LLM inference

Also creating tooling to do this at scale using edge computing. Working on publishing findings at IEEE.

ServiceNow

Staff Software Engineer & Technical Lead

June 2020 - December 2024 (4 years 7 months)

Amsterdam, North Holland, Netherlands

- Awarded UTG Llama Award for exceptional contributions in Q3 2021
- Primary frontend systems SME across the European engineering hub; sought out cross-regionally by US and India teams to deconstruct complex frontend platform fixes.
- Engineered deletion teardown architecture for Performance Analytics. Enabled administrators to bind custom automation workflows to dashboard deletion using ServiceNow Workflow Designer—preventing data-orphan cascades and securing audit compliance across enterprise instances.
- Partnered with Technical Support on critical customer case tasks, joining live troubleshooting sessions with enterprise clients to isolate complex production anomalies and deliver targeted platform hotfixes.
- Hardened and stabilized a brittle Puppeteer-based background rendering service to resolve systemic HTML-to-print export failures. Re-engineered aspect-ratio scaling and page-break algorithms—eliminating high-priority customer support escalations and stabilizing the automated PDF reporting pipeline for executive dashboards.
- Served as the accessibility (A11y) expert for the Platform Analytics suite. Established clear WCAG guidelines and architectural support while

maintaining team velocity—ensuring the suite passed mandatory VPAT/ compliance audits required for enterprise and public-sector procurement.

- Drove end-to-end engineering execution and process maturity. Acted as the operational linchpin for the team by managing product scope boundaries, ensuring upstream design readiness, enforcing technical rigor in story grooming, and driving retrospective action items through to completion.
- Invited to transition to the formal Engineering Management track following demonstrated technical and operational leadership across the unit.

Core Environment: Vanilla JavaScript, React, Java, HTML/CSS, Puppeteer, ServiceNow Seismic UI

Booking.com

Frontend Developer (core)

June 2017 - June 2020 (3 years 1 month)

Amsterdam Area, Netherlands

Engineered backend, frontend, and internal tools across critical units (CSI Compass, Bulk Tools, AV Performance). Spearheaded high-traffic A/B testing and system optimizations, operating at a Senior/Lead level across major partner-facing epics.

KEY ACCOMPLISHMENTS:

✦ PIONEERED GLOBAL ACCESSIBILITY (A11Y) ARCHITECTURE:

Architected and launched Booking.com's screen reader detection prototype—scaling company-wide experimentation, cutting false positive rates by 2.7x (~73%), and securing global regulatory compliance.

✦ HIGH-FIDELITY DESIGN-TO-ENGINEERING EXECUTION: Championed total design fidelity on complex interaction specs; partnered with product design to ship intricate calendar and workflow features with zero dropped details (formally commended across consecutive quarters as "thoroughfull").

✦ OPTIMIZED PARTNER BULK TOOLS: Led technical redesigns of administrative and partner-facing interfaces, streamlining high-volume data flows and eliminating task friction for global accommodation partners.

✦ HIGH-SCALE A/B TESTING & EXPERIMENTATION: Deployed high-traffic full-stack and frontend experiments within Booking's empirical testing culture, translating commercial goals into high-performance production code.

✦ ELITE TECHNICAL OWNERSHIP & VELOCITY: Proactively surfaced deadlocks and deconstructed stalled epics into actionable milestones to eliminate delivery bottlenecks; commended by leadership for execution focus that formally "set [me] apart from peers."

✦ SENIOR LEADERSHIP IMPACT: Recognized for advanced engineering craft and cross-team delivery—establishing the leadership foundation that

catalyzed appointment directly into a Staff Software Engineer & Technical Lead role at ServiceNow.

Core Environment: Vanilla JavaScript (ES6+), Perl, Java, BUI Component System, HTML5/CSS3, SonarQube, Empirical A/B Testing (ET)

Freshworks Inc. (formerly Freshdesk)

Senior Frontend Developer

January 2017 - April 2017 (4 months)

Chennai Area, India

- Engineered core CRM frontend modules for the Freshsales product in Ember 2, modern ES6, and Rails, delivering rich, reactive sales pipeline workflows and interactive components.
- Accelerated engineering onboarding and developer velocity by architecting standardized Docker and Vagrant environments, reducing local setup time for new hires from days to minutes.

ThoughtWorks

4 years 7 months

Senior Full Stack Developer (Client: BCG)

August 2016 - December 2016 (5 months)

Chennai, Tamil Nadu, India

- Architected the core data platform (Java/Spring Boot, Rails): Engineered a unified web application enabling disparate data streams to be aggregated and pushed into Tableau for executive consulting insights.
- Engineered the CI/CD and infrastructure pipeline from scratch: Replaced manual provisioning with deterministic Vagrant VMs for local developer environments, and automated production deployment pipelines using Ansible and Capistrano.
- Led technical enablement and frontend architecture: Established the complete development and build pipeline for the front-end codebase. Mentored and coached junior full-stack developers to enforce clean architectural boundaries and programming best practices.

Senior Product Engineer

June 2012 - December 2016 (4 years 7 months)

India

- Strategic Forward Deployment: Operated as a highly mobile technical anchor across India, forward-deployed directly to tier-one client sites (Royal Bank of Scotland, YuMe) and multiple national ThoughtWorks hubs (Pune, Gurgaon, Hyderabad) to stabilize and accelerate enterprise delivery.

- Full-Stack Product Architecture: Partnered directly with clients to define UX strategy, subsequently engineering the end-to-end implementation across diverse enterprise backends (Rails, Java, C#, WordPress, Spring, Scala). Executed the frontend architecture utilizing multiple modern frameworks (React, Ember, Angular, Vue) based on project constraints.
- DevOps & Infrastructure Automation: Architected deterministic local development environments (Vagrant) and engineered robust, automated CI/CD production deployment pipelines from scratch (Ansible, Capistrano).
- Technical Enablement: Anchored project teams as a core technical lead, actively mentoring junior full-stack developers in complex feature implementation, code hygiene, and agile delivery dynamics.

Senior Consultant – Forward Deployed (Client: YuMe)

January 2015 - September 2015 (9 months)

Chennai, Tamil Nadu, India

MULTI-SCREEN VIDEO AD-TECH PLATFORM

- Architected Core Framework: Designed and implemented the core AngularJS frontend framework and reusable component library, establishing scalable architectural standards adopted by client teams for long-term independent feature development.
- Engineered SIR Platform: Built the single-page application (SPA) frontend for YuMe's core Supply-Demand Inventory Reconciliation and Matching platform using AngularJS and ZURB Foundation.
- Optimized High-Density Performance: Tuned AngularJS digest cycles and data-rendering pipelines to ensure seamless filtering and real-time query execution across massive ad-inventory matrices.
- Standardized HTML Email Delivery: Resolved cross-client rendering inconsistencies for transactional emails, establishing styling standards and guiding backend engineers on legacy email client compatibility (Outlook, Gmail).
- Drove Account Expansion: High-caliber technical execution converted an initial 3-month contract into a 9-month account extension, securing long-term revenue for ThoughtWorks while setting engineering code hygiene benchmarks.

Senior Product Engineer (Client: Newgen Knowledgeworks)

May 2013 - February 2014 (10 months)

Chennai, Tamil Nadu, India

- Proactive Scope Expansion: Deployed initially for standard UI remediation. Recognizing fundamental UX flaws, independently built a high-fidelity prototype (Photoshop) solving key contextual UI bottlenecks. Pitched this

directly to the client, successfully securing authorization to take total ownership of the end-to-end user experience.

- **Delivery Pipeline Rescue:** Identified systemic product delivery failures driven by a highly inefficient, rework-heavy development cycle that lacked clear technical contracts between the client and the engineers.
- **Stakeholder Alignment & Prototyping:** Partnered directly with Business Analysts and client stakeholders to translate abstract requirements into high-fidelity visual designs (Photoshop), forcing structural alignment before any code was written.
- **Engineering Pipeline Protection:** Established a strict "visual contract" based on approved prototypes, effectively shielding the downstream engineering pipeline from shifting requirements and scope creep.
- **Full-Stack Implementation (Ruby on Rails):** Executed the finalized designs by engineering bespoke, highly performant, and cross-browser conformant UI components (HTML/CSS/JS), integrating them seamlessly into the core Rails architecture.

Self Employed

Open Source Maintainer - WP Autoresponder

June 2009 - April 2014 (4 years 11 months)

Chennai, Tamil Nadu, India

Engineered and published WP Autoresponder, a pioneering, self-hosted email marketing and automation platform designed as a decentralized alternative to commercial SaaS vendors (MailChimp, AWeber).

- **Global Scale & Footprint:** Scaled the platform to 150,000+ downloads and 40,000+ active production server deployments worldwide, powering subscriber communication for digital publishers and webmasters globally.
- **Distributed Systems Architecture:** Architected a local queuing and dispatch engine capable of scheduling complex N-day drip sequences, dynamic subscriber segmentation, double opt-in verification, and custom HTML templating directly on host infrastructure.
- **Ecosystem & Framework Expansion:** Authored an entire companion software suite including wp-plugin-framework, membership bridges (s2Member integration), migration engines, wordpress multiuser adaptations.
- **Market Impact & Competitor Adaptation:** Established such widespread ecosystem adoption that leading commercial competitors (including MailPoet/ Wysija) engineered dedicated database migration pipelines to ingest WP Autoresponder table schemas to migrate my users during their onboarding process.

Chitika, Inc.

Software Engineer

May 2011 - May 2012 (1 year 1 month)

Greater Hyderabad Area

GPS-Free Inertial Navigation (Dead Reckoning): Prototyped a dead-reckoning positioning system on Android using linear acceleration to track movement without satellite lock. Implemented double-integration physics and custom noise-filtering algorithms to mitigate the compounding drift of consumer MEMS sensors.

Protocol Reverse-Engineering & Schema Reconstruction: reverse-engineered the Android Market app to map its undocumented communication protocol with Google's servers. Pulled the APK from an emulator, decompiled the bytecode, extracted the raw hex of their Protocol Buffers, and reconstructed the .proto schema from scratch. Wrote Python automation to communicate with the servers directly, systematically indexing developer ecosystem data and SDK footprints to accelerate ad inventory sales.

Tata Consultancy Services

Assistant Systems Engineer

September 2009 - March 2011 (1 year 7 months)

Greater Hyderabad Area

Assistant systems trainee which was a catch all title for a variety of roles

* Designed and developed features for Ericsson's telecom management tool in C++.

* Implemented an automated test framework for base station management application using Perl.

* Developed internal project management tool to assign and manage tasks and resources in the project network in PHP/MySQL/HTML/CSS.

Individual Freelancer

Freelance Programmer (Part-time)

October 2004 - April 2009 (4 years 7 months)

Working with small scale webmasters around the world:

- Develop small scale web applications in PHP/HTML/CSS/Javascript
- Design small websites using Photoshop
- Write server side automation in PHP
- Set up and maintain CMSs

Easy Link Web & IT Solutions
PHP Programmer
April 2006 - June 2006 (3 months)
Chennai Area, India

Note: This was NOT as the industrial training exercise or internship. I was a full-time software engineer employee.

Develop CMSs for small websites in PHP/MySQL/Javascript/HTML/CSS

Developed a web application framework and CMS to be used for developing many websites within the company.

Education

Vellore Institute of Technology

Bachelor of Technology - BTech, Computer Science · (July 2004 - April 2009)