

NILAY KHANDELWAL

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I'm a software engineer with 14+ years of experience building scalable, high-performance systems in ad tech, full-stack development, and distributed computing. I enjoy solving complex engineering challenges and making systems run faster, smarter, and more efficiently.

SKILLS

Programming Languages: C#, .NET Core, ASP.NET, JavaScript, Java, PHP, SQL, Python, VB.NET

Databases & Caching: MongoDB, Redis, Microsoft SQL Server, Apache Druid

Cloud & Infrastructure: AWS, Amazon Kinesis, CDN design, edge computing

Development Tools & Frameworks: ASP.NET MVC, jQuery, Git, NHibernate, CodeIgniter

Specialties: Distributed systems, high-scale ad tech, fraud detection, automation, business analytics, performance optimization

WORK EXPERIENCE

Senior Software Engineer

AdSupply Inc

June 2011 - Present

Culver City, CA

Help architect and optimize the core ad-exchange platform, transitioning from .NET Framework to .NET Core to improve scalability and efficiency. The ad-serving engine handles 1B+ daily ad requests, integrating with SSPs and DSPs while delivering low-latency, high viewability ad experiences.

- Optimized ad-serving architecture with MongoDB, Redis, and Amazon Kinesis, achieving sub-100ms response times and increasing eCPMs.
- Developed high-revenue ad units (popunders, web-push, programmatic) that contributed to over 60% of ad volume, and co-designed a patented proxy system to bypass ad blockers, driving innovation in format design and delivery infrastructure.
- Designed CDN, asset servers, and edge-compute services, reducing hardware costs while improving performance.
- Led efforts to identify and mitigate ad fraud, ensuring cleaner traffic and stronger revenue integrity.
- Built rules-based automation tools using Apache Druid, enabling real-time tracking and large-scale data aggregation.
- Developed ASP.NET MVC business tools and JavaScript analytics plugins, making data management and visualization easier for internal teams.
- Researched semantic extraction and keyword analysis, enhancing ad-matching algorithms for better audience targeting.
- Led support engineering, resolving production issues and ensuring seamless third-party integrations.

Software Engineer

EventSorbet

Santa Monica, CA

An early-stage startup developing an event management platform, I worked as a Software Engineer, primarily focused on building and enhancing core platform features.

- Collaborated with the founding team on the initial setup of the platform stack using ASP.NET MVC, NHibernate ORM, JavaScript/jQuery for the UI, and Git for version control, ensuring efficient development and collaboration.
- Developed and optimized the event search feature, which became the primary method of interacting with the platform.
- Integrated Stripe payment service to enable credit card checkout, manage subscriptions, and streamline event vendor payouts, reducing manual processing for the internal team.

Student Programmer

University of Southern California

October 2010 - May 2011

Los Angeles, CA

Worked at the School of Pharmacy developing in-house custom web and database applications in VB.NET.

- Developed a time tracking system for employees, enhancing operational efficiency.
- Maintained, tested, and documented code for internal employee support applications.

Associate Intern

OnGreen

May 2010 - August 2010

Los Angeles, CA

Joined a Series A startup focused on building an online platform to help green startups connect with investors and raise capital.

- Collaborated with offshore engineering team to test and resolve platform bugs.
- Set up and managed a support ticketing system using osTicket on a managed LAMP stack server.
- Configured and maintained a phpBB user forum on the LAMP stack to facilitate interaction between platform stakeholders.

Internship Trainee

Infosys Technologies Ltd.

Jan 2009 - May 2009

Mysuru, India

EDUCATION

M.S. in Computer Science

University of Southern California

2009 - 2011

Los Angeles, CA

B.Tech. in Computer Science Engineering

Jaypee Institute of Information Technology

2005 - 2009

NOIDA, India