## Sunil Kidambi Cupertino, CA 95014 | 408-480-7131 | [sunil@kidambi.net](mailto:sunil.kidambi@yahoo.com) | https://www.linkedin.com/in/sunilkidambi

Software Engineer/Architect

Experienced Backend Engineer with a strong background in AWS Cloud infrastructure and application development. Skilled in backend development using Python, C/C++, and Java, with a focus on creating scalable solutions. Successfully implemented automation scripts that improved runtime efficiency by 75% and optimized AWS resource management. Leverages extensive backend development expertise to drive innovative solutions in a backend engineering role.

Areas of Expertise

AWS | C/C++/Java/PHP/Python | Linux/Bash/PowerShell | MySQL 5.7, 8 | Jenkins | Terraform | Ansible | Docker | CI/CD Pipelines

Experience

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| **SafeSchoolMap LL**C *Technical Co-founder* | **Jan 2025 - Present |** *Cupertino, CA* |

* Architected API solution to provide incident reports around schools in USA.
* Set up the dev on-site and prod environments in AWS
* Used docker containers to host Python (FastAPI), postgREST, pg\_bouncer components, and postgres in Dev.
* Used gitlab-ci for production deployments
* Established the dev practices for issue reporting and fixing
* Worked with Business for sourcing information from vendors, including arcGIS, crimeometer
* Migrated the wordpress frontend to AWS Lightsail, integrating with API layer
* Designed the postgres/postGIS database to best serve the purposes of performance, security, extensibility and the ability to switch data tables

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| **Insurity Inc** *Python/AWS Infrastructure backend Developer* | **Oct 2021 - Nov 2024 |** *Milpitas, CA* |

* Developed cloud automation scripts in Terraform (IaC), Python, bash and powershell for bringing up development and other environments on AWS cloud shortening timelines for new product spinoff from days to hours
* Developed RESTful Pdf generator as part of company hackathon using GenAI
* Carried out integration tasks for merging the AWS assets of Codeobjects with Insurity, involving several AWS services such as transit gateways, IAM, WAF, and third parties like Cloudflare, Observe, Big Panda, Nagios, dnsmadeeasy. Provided incident management and was on call on Splunk and other pager technologies.
* Created a framework to generate userdata scripts based on a JSON format, which is agnostic of the operation system (Windows or Linux), using terraform as the glue

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| **CodeObjects (An Insurity company) Inc** *Python/AWS Developer* | **May 2019 - Sep 2021 |** *Milpitas, CA* |

* Developed, modernized or improved scripts in Python (converted from 2 to 3 in some cases), bash and Powershell for automating build and deployment (CI/CD), Database refresh, report creation and other developer experience tasks that accelerated dev tasks.
* On AWS worked with Elastic Beanstalk, Lambda, EC2, cloudwatch, cloudtrail, SNS, SMS, SES, and other such platforms connected with reporting and observability to set up alerts going to the on-call modules.
* Implemented several cycles of cloud cost optimization, monitoring and controlling cost escalation. Took on advisory role for Dev teams in their cloud evolution
* Automated deployment, created infrastructure and scripted tasks on AWS using AWS CLI, Python, Bash and Powershell

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| **Atlassian Corporation** *Python/AWS Developer* | **Jan 2019 - Apr 2019 |** *Mountain View, CA* |

* Refactored Python (Gunicorn) codebase to transition to using bulk IO from Amazon SQS, resulting in improved system performance and efficiency
* Contributed to SQSWorkers, an open source project for managing Python threads, enabling integration with above improvisation.
* Automated End to End test as well as unit test writing using pytest mock/patch, Scala/Gatling to maintain CI/CD readiness.
* Made deployments to dev, stage environments using docker build, tag and push and Atlassian's micros tool. (Experience gained with Atlassian's deployment model)
* Implemented an Agile process. Story grooming, estimations (Experience gained on Agile/Jira).
* Worked with Datadog (system monitoring tool) and Splunk (Experience gained in Datadog integration with applications and monitoring)

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| **Yahoo Inc** *C++/Java Developer* | **Oct 2017 - Jul 2018 |** *Sunnyvale, CA* |

* Implemented GDPR (General Data Protection Regulation) for Display Ad exchange to make Brightroll tool compliant with applicable laws and conventions.
* Worked with Codahale and Yamas metrics to measure stats relating to GDPR signals (Experience gained in application and monitoring tools integration).
* Worked on production systems doing operations such as test deployment, turning on logs, enhancing log level, using tcpdump to retrieve POST content, using curl to query cache (Experience gained in deployment testing model/practice).
* Created automated unit and functional tests. Migrated Jenkins CI/CD jobs to Screwdriver for Java, C++ builds.
* Worked on high value tickets from Ad Exchange product, enhancing revenue several hundred thousand.
* Onboarded new publishers and modified bidding rules as per new high-value publisher requests.
* Interfaced with other subsystems using JSON, Protobuf, gaining further experience in said tools.
* Performed queries and understanding stored procedure logic using MySQL (Experience added in this subject)

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| **Alphabet Inc** *C++/Python Developer* | **Apr 2016 - Sep 2017 |** *Mountain View, CA* |

* Implemented client-side library for SAS (Spectrum Access System) using C99 and Jansson JSON generator and parser, enhancing distribution to SAS partners and strengthening Google partnerships
* Implemented POC solution for automated digital certificate generation using Python and Go language (GOLANG) in google app-engine (Google Cloud) environment.
* Generated and managed SSL certificates for SAS and SAS test harness.
* Contributed to Wireless Innovation Forum's test harness using Python, completing several test cases as defined by Winn Forum. GitHub link: <https://github.com/Wireless-Innovation-Forum/Spectrum-Access-System>.
* Supported partner companies adopting client lib software for their CBSD units. Supported development and integration efforts for other partners developing their own Client libs.
* Reviewed TS specs and Winn Forum test artifacts, and developed test cases using Protobuf based on Winn Forum protocol tests, ensuring compliance and accuracy

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| **Yahoo Inc** *C++/Java developer* | **Jun 2015 - Mar 2016 |** *Sunnyvale, CA* |

* Implemented security fixes for PHP and JavaScript code, integrated mail systems with third-party solutions, and optimized legacy builds by writing scripts to split make files, supporting build speedup efforts. Automated deployment package-set generation with scripts and managed Jenkins instances for CI/CD on the OpenStack platform, enhancing deployment efficiency
* Collaborated with the e-commerce team to support PayPal payment gateway feature requests, aligning with new credit card processing requirements. Utilized C++/STL/JSON to create a mini JSON schema specification and parser, improving payment processing accuracy and compliance

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| **Zonar Systems Inc** *PHP/C++ Developer* | **Aug 2014 – May 2015 |** *Seattle, WA* |

* Maintained and developed new features for fleet management software using C++ and PHP, ensuring real-time data from Zonar devices was accurately captured in a PostgreSQL Database, enhancing data reliability for fleet operations

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| **Bloomberg L.P.** *C++ Developer* | **Mar 2014 – Jul 2014 |** *Manhattan, NY* |

* Developed various features using C++/STL, JavaScript, SQLite, and XML for a new Bloomberg Fixed Income application on the Bloomberg Console platform, enhancing user experience and application performance

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| **Endurance Inc** *VC++/MySQL/Oracle Developer* | **Sep 2013 – Feb 2014 |** *Palo Alto, CA* |

* Migrated e-commerce/web hosting portal application from Oracle DB to MySQL using Visual Studio 10 and legacy libraries, involving VC++, Java, Hibernate, MyBatis/iBatis, and SOAP Server/client, enhancing database performance and compatibility

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| **Fiserv Inc** *Python/PERL/Bash/Javascript/ELK Developer* | **May 2013 – Aug 2013 |** *Sunnyvale, CA* |

* Implemented log file parser, Elasticsearch backend storage model, and front-end using Javascript, Ajax, ELK (Elasticsearch/Logstash/Kibana) stack and Python scripting for Devops team

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| **ETrade Financial Corporation** *Java/C++/Perl/Oracle Developer* | **Sep 2011 – Apr 2013 |** *Menlo Park, CA* |

* Wrote features with C++ RESTful API. Batch Scripts for Systematic investment plan.

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| **Networks In Motion Inc** *Python Developer* | **Sep 2009 – Aug 2011 |** *Aliso Viejo, CA* |

* Developed Python/C++ backend for the Gokivo-based mobile navigation app, utilizing JSON, XML, REST API, and Oracle stored procedures for efficient feed processing (ETL). Integrated mobile apps using TDD, enhancing app functionality and user experience

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| **Wells Fargo Bank** *Javascript/Hibernate Developer* | **Dec 2008 – May 2009 |** *West Des Moines, IA* |

* Developed and implemented aspects of Home Loan Application processing workflows using J2EE with Spring, Hibernate, HTML/CSS, Rhino Javascript, and Lombardi Frameworks, improving efficiency and accuracy in loan processing

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| **State Department Of health via SVAM Inc.** *Java Swing/Sybase developer* | **Oct 2007 – Nov 2008 |** *Albany, NY* |

* Modernized the Nursing Homes tracking system by transitioning from a PowerBuilder and Sybase Stored Procedure app to a Java Swing client, enhancing system performance and user interface

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| **Medco Inc** *C++/Java Backend developer* | **Jan 2007 – Sep 2007 |** *Somerset, NJ* |

* Designed, developed, and documented several website features using C++/STL, XML, JavaScript, JSON, Messaging, and Oracle Database, enhancing user experience and functionality

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| **NASD** *Java/C++/Oracle Developer* | **Jun 2006 – Dec 2006 |** *Rockville, MD* |

* Developed and maintained ETL processes for Municipal Bonds and Corporate stocks data using Java and Spring systems with XML (Oracle), improving data accuracy and processing efficiency

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| **JP Morgan** *C++/Perl Developer* | **Oct 2005 – May 2006 |** *Houston, TX* |

* Developed, tested, and maintained existing and new feed handling (ETL) code using C++/STL, Perl, and Unix Shell scripting, with Oracle Database backend, improving data processing efficiency

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| **Misys Financial** *Senior Software Engineer* | **Sep 2004 – May 2005 |** *Bangalore, India* |

* Developed new features for Misys financial product using C++ and Subversion (SVN), enhancing product functionality and improving user experience

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| **Scientific Atlanta** *Senior Software Engineer* | **Jan 2004 – Aug 2004 |** *Chennai, India* |

* Designed and developed 3-tier systems using JSP, SOAP, C++/STL, multi-threading, and synchronization, enhancing system performance monitoring and reporting

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| **Integra Microsystems** *Senior Software Engineer* | **Sep 2000 – Jan 2004 |** *Bangalore, India* |

* Developed various systems projects and applications using VC++/C++ for clients like Samsung, Motorola, and Rockwell Automation on Windows, Linux, and embedded systems, enhancing client software capabilities

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| **Khodayss Systems** *Programmer* | **Sep 1999 – Sep 2000 |** *Bangalore, India* |

* Developed desktop applications using Visual Basic and created web applications with ASP 3.0/IIS, enhancing user experience and system efficiency

Education/Certifications

**Madurai Kamaraj University**

*Master of Computer Applications (MCA)*

**Harvard Extension**

*cs50 (C, Python, Web)*

**Amazon Web Services**

*AWS Certified Solutions Architect Assoc.*