

# Naveen Akkapeddi

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## PROFESSIONAL EXPERIENCE

### Dun & Bradstreet Inc

Sr. Site Reliability Engineer

Remote/WFH, NV

June 2020 - Present

- Infrastructure Automation *AWS, Jenkins, SaltStack, Amazon CDK, CloudFormation, CloudCustodian, Python*
  - Migrated and implemented Troposphere CloudFormation template generation to CDK
  - Created Jenkins job to run linting and tests for CDK repo
  - Developed and automated deploy of PoC microservice to ECS / Fargate using CDK
  - Developed and implemented security autoremediation policy for all EC2 instances in business unit using CloudCustodian deployed to AWS Lambda in all AWS accounts
  - Automated removal of unused EBS volumes in AWS account, leading to cost savings when removed.
  - Enabled distributed tracing on web applications, to further enhance logging capability for web applications and improved traceability of web requests.
- Production Support *PagerDuty, xMatters, Monit, Papertrail,*
  - Participated in on-call rotation for one week every month to do production support
  - Escalated issues with considerable risk to development tech lead and engineering manager
  - Performed RCA on failing production and QA services, minimizing outages and conforming to organization level SLOs and SLAs
- Release Management *JIRA, Confluence*
  - Supported team's release process by performing release manager weekly rotation
  - Summarized business need and risk for tickets SRE team worked on during weekly sprint cycle

### Apex.AI, Inc

Sr. DevOps Engineer (Platform)

Palo Alto, CA

May 2019 - Nov 2019

- ApexOS ECU Buildfarm *Docker, Python, C++, C, Amazon Web Services, GitLab*
  - Designed and implemented embedded build and test automation farm
  - Automated running nightly performance tests on the embedded buildfarm. Hardware includes embedded platforms our customers target for their autonomous driving software, such as the Renesas RCAR-H3
  - Created custom GitLab CI Runner to facilitate running generic tests on embedded platforms running our dockerized build environment for ARM64 and x86\_64, which communicates over serial port and SSH for end-to-end automation including flashing embedded hardware
  - Implemented utility to set unique hostnames on embedded platforms, aiding the platform team in diagnosing and validating faulty hardware
  - Presented work on embedded build and test automation farm to partners and customers, gathering feedback and driving future improvements/requirements.
- Infrastructure Automation *Ansible, Terraform*
  - Created centralized monorepo for Ansible playbooks and infrastructure automation
  - Implemented Ansible playbooks for provisioning every embedded platform we support for our customers
  - Implemented Terraform layout of our existing AWS infrastructure that was manually spun up

**Anki Inc***Software Engineer (Build)***San Francisco, CA**

June 2018 - May 2019

- Vector/Elemental Platform *Go, Docker, Python, C++, Java, Groovy, Ansible, Amazon Web Services*
  - o Designed and built CI/CD pipelines for different build configurations for Vector robotics platform
  - o Dockerized build environment to guarantee and verify 100% reproducible builds
  - o Utilized Ansible to orchestrate spinning up microservices and Jenkins CI/CD server
  - o Programatically set up Okta integration and Jenkins CI/CD user groups
  - o Designed and implemented microservice to schedule pull request builds based on Github events using AWS Lambda, SQS, and AWS API Gateway
  - o Piped GitHub Pull Request events to Slack
  - o Designed and implemented microservice to provision minimum amount of vSphere VM resources to run CI/CD pipelines, saving the company VMWare licensing fees
- R&D Project *Python*
  - o Created proof of concept for facial emotion detection/empathy on Vector robotics platform. The robot would recognize your facial emotional state using machine learning for face detection/analysis. The robot would play a specific animation, reacting to your facial expression.

**Work Exchange Inc***Co-Founder/CTO***Sunset Beach, CA**

2017 - June 2018

- Woxio (Backend) *Go, Docker, PostgreSQL, MongoDB, Redis, Amazon Web Services*
  - o Designed and implemented scalable REST API for Woxio.
  - o Designed and implemented scalable chat server utilizing WebSockets.
  - o Implemented microservice architecture with Redis PubSub (microservices communicate with each other via JSON messages)
  - o Designed and implemented document conversion microservice that ingests Office formats and returns PDF for front-end document preview feature.
- Woxio Teams (Frontend) *HTML5, CSS3, WebRTC, JavaScript, Polymer*
  - o Designed and implemented HTML5 video conferencing with WebRTC for Woxio Teams.

**Apple Inc***iOS Location Engineer, Wireless Technologies***Cupertino, CA**

2014 - 2017

- CoreLocation *Python, Bash*
  - o Automated QA testing of new location services (GPS) features for iOS and watchOS.
  - o Parallelized iOS device log processing pipeline to utilize Hadoop Cluster, instead of sequentially processing very large numbers of small files.
- CoreLocation Frameworks *Python*
  - o Created automated test suites that are run on-demand with iOS/watchOS device pairs to qualify CoreLocation features using an internally developed framework.
  - o Automated test suites are used in daily Continuous Integration system for CoreLocation.
  - o In one automated test case, utilized tesseract to OCR watchOS homescreen screenshots to validate an internal CoreLocation feature that drives local sunrise/sunset time.
- Misc (20% Project) *Objective-C*
  - o Mail client that allows users to create tags to categorize their emails using supervised machine learning.

**J.P. Morgan Chase & Co***Technology Analyst, Central Technology***Jersey City, NJ**

2012 - 2014

- Developed business requirements as per clients' specifications. Automated manual daily tasks using scripting languages. Worked primarily for compliance/risk management group.
  - o Created, modified, and debugged Python scripts that involved ETL of binary files into JSON.
  - o Unit tested code to full coverage. Used pylint to point out problematic areas in existing code.
  - o Did manual QA testing of a real time web dashboard.
- Proprietary Project
  - o Mortgage Banking: Advised Mortgage Banking client on the best way to integrate Google Search API with Company Home Intranet Search. Parsed XML feed from software and provided it to Intranet Services Group for search engine indexing.

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## EDUCATION

### Drew University

*Bachelor of Arts*, magna cum laude (GPA 3.8)  
Majoring in Economics

**Madison, NJ**

Fall 2009 – Spring 2012

**Relevant Coursework:** Econometrics, Artificial Intelligence, Statistics, Symbolic Logic, Data Structures.

**Research Assistantship:** Assisted Dept. Chair in econometric analysis of the effect sanctions had on entrepreneurship in Iran.

**Final Project:** Attempted to predict the stock price of a particular stock (GOOG) using neural networks.

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## ACTIVITIES & RECOGNITIONS

### Drew University:

- **Dean's List** – Fall 2009 - Spring 2012
- **Omicron Delta Epsilon** – International Economics Honor Society
- **Summer Wall Street Program**
- **Donald J. Fariello Memorial Prize**
- **Economic History Award**