

# VARUN VENKATESH

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Los Angeles CA 90007

## EDUCATION

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University of Southern California, Los Angeles — Master of Science in Computer Science	Aug 2021-May 2023
PES University, Bangalore — B. Tech. Computer Science & Engineering (CGPA 9.48/10)	Aug 2015-May 2019

## WORK EXPERIENCE

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Software Engineer, Microsoft India Development Center, Hyderabad	Jul 2019-Jul 2021
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**Azure Networking - Front Door, CDN** (Azure, C#, .NET Framework, Kubernetes, Docker, Go, Powershell)

- Implemented support for IPv6, managed identities and certificate rotation in an elastic platform for a cloud CDN service's data plane (reduced cluster spin-up time **from months to minutes**)
- Coordinated effectively with **4 teams** to incorporate IPv6 support for Azure Front Door on Windows containers, identified a container networking issue, and fixed it by **contributing to aks-engine** (an open-source project)
- Improved system security by updating Kubernetes clusters to managed identity authentication, and achieved zero-touch deployments — automatic identity creation and access control configuration in multiple Azure production clouds

**Core Platform Engineering** (Azure, Power Platform, C#, HTML, JavaScript, .NET Framework, Python)

- Developed accessible cross-platform employee engagement apps in an agile setting with a team of 4, Thrive suite is utilized by **thousands** of Microsoft employees to report time off, appreciate a colleague's effort or look up people in Microsoft
- Integrated a survey component to collect user feedback, created a Power BI dashboard to visualize ratings and feedback data, and identified top issues affecting users
- Standardized all apps by migrating application data from Azure Table Storage to Common Data Service and eliminating unnecessary custom connectors replacing them with more secure built-in connectors

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Software Engineer Intern, Goldman Sachs India, Bangalore	May 2018-Jul 2018
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**Price Verification** (React, SQL, internal scripting language)

- Built an interactive web widget to monitor exceptions in price data with React and added it to a global dashboard monitoring critical pricing data, **saving time and effort for financial controllers**
- Constructed optimal SQL queries to fetch exceptions, leveraged a query framework to execute queries from code, and set up a REST API endpoint for frontend widgets to access data

## PROJECTS

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Voice Assistant for Programming (Python, TypeScript, NLP, Speech, GCP)	Jan 2019-Apr 2019
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- Developed a VS Code extension to perform programming tasks with voice commands in natural language to demonstrate an application of NLP to make coding more accessible to people with visual or physical impairment
- Designed a customized grammar and scoring mechanism, an executor to convert meaning representations generated by a semantic parser to code and actions, and made a dataset of **~300** commands with desired outputs

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Code Search (Python, Regular Expressions, Information Retrieval)	Aug 2018-Nov 2018
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- Researched and implemented fast regular expression search techniques employed to find source code in large codebases, specifically Google Code Search (GCS) and Fast Regular Expression Indexing Engine (FREE), and came up with a unique benchmark performing better than GCS and FREE in certain cases

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Extractive Text Summarization (Python, AngularJS, JQuery, Flask, MongoDB, NLP)	Aug 2018-Nov 2018
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- Built an extractive summarizer with sentence scoring based on Bayes theorem and tf-idf indexed with the CNN dataset, and integrated it into a Q&A website featuring answer summarization, user profiles, voting, and search

## TECHNICAL SKILLS

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**Programming Languages, Frameworks & Tools** — Python, C, C++, C#, JavaScript, HTML, CSS, JQuery, PHP, SQL, Git, React, .NET Framework, Power Platform, Azure, Powershell, Kubernetes, Docker, Helm, Keras