Ved Dave

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B.S. Computer Engineering – Purdue University
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Hi, I'm Ved! I am a versatile backend oriented Software Engineer based out of Seattle with strong background in building and maintaining SaaS applications. I am passionate about leveraging AI to streamline and automate engineering workflows, including QA and process automation. In my personal time, I enjoy playing pickeball, going to the gym, and skiing. I also have a photography hobby where I primarily focus on street photography and portraits/headshots and enjoy taking my Sony camera wherever I go.

WORK EXPERIENCES:

Microsoft – *Software Engineer* **Aug. 2022 – Present**

Description: Dynamics 365 Customer experiences platform – Omnichannel messaging team

- Part of a rare opportunity to redesign and implement the infrastructure of a large scale CRM SaaS service to BAP Core Services
  - Designed and implemented service that handles attachment and file sharing in Omnichannel conversations
  - Created Messaging API's where our customer can integrate their native client side solution with Omnichannel service
  - Automated integration and E2E tests for these API's using CoPilot GenAI
- I owned driving a cross team effort to redesign and 100% automate our QA and Testing processes using CoPilot GenAI.
  - Created reusable GPT prompt templates to create automated test cases and set up daily pipelines to run these AI generated tests
  - Used templates to automate 150+ E2E test cases that were covered by manual QA testing
  - Expanded scope of the project to sister teams and greater organization (400+ additional test cases org wide)
  - In total reduced QA hiring costs for the team + sister teams by 70%
- Invaluable experience delivering swift mitigation and support to some of Microsoft Dynamics' most important customers on on call incidents and learning how to be customer obsessed in all stages of development.

Microsoft – *Software Engineering Intern* **May 2021 – Aug. 2021**

Description: Integrating Microsoft Dynamics services (Omnichannel) into a lightweight and extendable form powered by Microsoft Teams.

- Set up multiple API's to communicate between Dynamics and Bot Framework to support end to end messaging from Teams Agents
- Designed and implemented Teams application to interface with my Omnichannel API's.
- Ran rigorous testing protocols on the Teams app and demonstrated proof of concept at MS internal expo.

Stealth Startup – *Full stack app development Intern* **June 2020 – Aug. 2020**

Description: Created React Native app for restaurant delivery services startup designed for catering to enterprise events.

- Designed and created front end app client for users optimized with responsive interfaces.
- Developed authentication pipeline and user data queries using SQL server hosted through Google FireStore

Purdue University – *Physics Teaching Assistant* **Dec. 2018 – May 2019**

Description: Proctor lab sessions for introductory mechanical physics lab multiple times a week. The labs usually consist of students doing a lab experiment, and then running a model one in a python-based simulator. Then they compare results and do a lab report by the end of the week.

- Assisted students with questions about the lab, and python simulations to model lab experiments
- Graded lab reports and providing concise and constructive feedback

PROJECTS:

TinyChain – Blockchain system for IoT devices:

Senior undergraduate capstone project – We created a fork of the open source blockchain architecture "iroha" and optimize it for lightweight IoT type devices. We tested and demonstrated our proof of concept on a cluster of six raspberry pi's and recorded actions turning on a series of LED's to simulate a realistic way IoT devices would use our service. The ledger with all the recording actions was presented in the Purdue senior design expo.

Vertically Integrated Projects Research labs (VIP):

TensorFlow AI model development team:

Design and train neural networks based on the YOLO object detection project through partnership with Google. I was responsible create a new data pipeline with additional constraints from YOLOv3 and implement them in our new model garden. Visit https://blog.tensorflow.org/2020/03/introducing-model-garden-for-tensorflow-2.html to learn more and see our GitHub repository.

CAM2 Software Engineering team*:*

Made an open source code review tool to aid developers catch and fix bugs and inconsistencies using both static and statistical/machine learning analysis tools. My responsibilities were to make static analysis tools, including unused code, duplicate code, and profiling for runtime errors.

SKILLS:

Programming Languages: C • C++ • C# • Python • Java • JavaScript • SQL • HTML/CSS • Verilog • Swift • Matlab
Software/Tools: Tensorflow • React.js • Git • .NET • Flask • Azure • MongoDB • CosmosDB • GPT4 • Google Firestore