Aishwarya Ramanathan

GCP Technical Solutions Engineer at Google Cloud Canada

aishr@techie.com aishr.github.io aishr aishwaryaramanathan

– Experience –

Sep 2021– Technical Solutions Engineer - **Google Cloud Canada**
- Manage customer issues through effective diagnosis, resolution, or implementation of new investigation tools
- Specialized in a variety of serverless products including App Engine, Cloud Run, Cloud Functions, Cloud Build, and Firebase Suite
- Develop an in-depth understanding of Google's product technology and underlying architectures
- Assess customer issues and advocate for their needs with cross-functional teams, including product and engineering teams

Sep 2016–Sep 2021 Computer Science & Mathematics Teaching Assistant
University of Toronto & University Of Waterloo

May 2017–Aug 2018 Full Stack Developer Intern - **Indigo Books & Music**
Projects include Competitive Pricing, Catalog Cloud Migration (CCM) & Cloud Pricing Dashboard (CPD)
- CCM: Built an internal system in C# to programatically populate cloud based noSQL (Azure Tables) catalog using Azure Message Bus Pub/Sub topics and subscriptions with on premise SQL catalog entries; Team based project utilizing agile methodologies (Scrum)
CPD: Introduced Azure Cloud Pricing into an internal dashboard, made with React Visual Libraries and Azure Consumption APIs for C#, for easy cost viewing and analysis.

– Personal Projects –

Spelling Bee [Source] [Site]

- Experimentation project to learn Angular and Rust
- Formatted for a mobile browser
- Github Actions produces a brand new set of letters each day

Browser Landing Page/Startpage [Source] [Site]

- Originally written in HTML/CSS/JS, revisions in React, Vue, and Angular
- OSX styled shortcut dock with keyboard shortcuts for quickly accessing frequently used websites
- Search bar that handles keyboard shortcuts as well as general search

Spacer Dashboard (ReactJS, d3) [Source]

- Developed a visualization system for a variety of benchmarks for the model checking program, Spacer
- Includes different views for select metrics (ex. time, memory, num of lemmas, etc.)

– Publications –

- Masters Thesis: Hubble Spacer Telescope (C#, Python, ReactJS) [FE Source] [BE Source] [Prose Source]
  - Allows a user to view SPACER's exploration tree of potentials proofs and counterexamples
  - Smart editing using **Microsoft Prose' Program Synthesis Framework**
  - Created a custom domain specific language for Prose to synthesize programs with
- Zehra, S., Ramanathan, A., Zhang, L. Y., and Zingaro, D. Student Misconceptions of Dynamic Programming. In Proceedings of the 49th ACM Technical Symposium on Computer Science Education (SIGCSE '18). Link
  - Identifies and analyzes why students have trouble learning the dynamic programming algorithm
  - Research process included interviewing multiple students while recording their responses for analysis

– Education –

2019–2021 **Masters**, MMath in Computer Science, **University of Waterloo**; Supervisors: R. Trefler & A. Gurfinkel
2014–2019 **Bachelors**, HBSc. in Computer Science and Math, **University of Toronto**