

HEMA THOTA

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EDUCATION

Masters of Science in Computer Science, University of California San Diego, La Jolla, US **Sep 2020 - Mar 2022**
GPA: 4.0/4.0 | Relevant courses: Algorithms, Compiler Design, Probabilistic Reasoning and Decision Making

Bachelor of Eng. in Computer Science, M S Ramaiah Institute of Technology, Bangalore, India **Aug 2012 - Jun 2016**
GPA: 9.77/10.00 | Awarded **Gold Medalist** and **Best Achiever**, CSE Department
Relevant courses: Data Structures, Algorithms, Cloud Computing, Big Data & Data Science

SKILLS

Programming Languages: Python, C#, JavaScript, Java, VBA

Querying Languages: SQL, DAX

Web Technologies: ASP.NET MVC framework, C#, JavaScript, JQuery, HTML5, Bootstrap, CSS, LINQ

Cloud Technologies: Google Cloud (Airflow, Big Query, Cloud Storage), Azure (Data Factory, Data Lake, Data Bricks)

Business Intelligence: Reporting (Tableau, Power BI), ETL (SSIS, UC4), OLAP (Tabular and multidimensional SSAS)

WORK EXPERIENCE

Software Engineering Intern, Autonomous Driving Team, Qualcomm, San Diego, US **Jun 2021 - Sep 2021**

- Implemented frame selection algorithm to drive continuous learning process for camera perception engine
- Built a data pipeline to load data, trigger frame selection process and write results back (using Apache Airflow)

Senior Analyst, Financial Risk Management, Swiss Re, Bangalore, India **May 2019 - Sep 2020**

- Built accurate and interactive dashboards in Power BI and Tableau to track key indicators for business teams
- Nominated for **Hasthi Award** for reducing 5 hrs/week of manual effort of users by developing automated dashboards
- Enhanced data storage and refresh process for Tableau reports, decreasing load time of reports by 50%

Data Engineer, Thorogood Associates, Bangalore, India **Jul 2016 - Apr 2019**

Endowment Management Project for a firm handling endowments of a prestigious UK University

- Built a web application (in ASP.NET using MVC 3.5 framework) for users to track funds, cash flows, valuations
- Designed and developed a workflow to digitalize the manual document approval process via a web application
- Decreased the processing time of SSAS cube by 60% through tuning SQL objects and creating SSAS partitions

Supply Chain Management Project for a leading Consumer Packed Goods Manufacturer

- Designed and built an end-to-end system in Azure cloud to extract and analyze past sales data
- Received **Star Award** for skilling up in Azure technologies and delivering a successful product within a tight deadline
- Working as a **technical lead**, mentored 3 juniors and scaled and automated the product to serve more markets
- Improved the performance of a critical SQL stored procedure by 300% (48 to 12 hours) by redesigning the logic

PROJECTS

Python to WebAssembly Compiler (a subset), Advanced Compiler Design Course, UCSD, US **Feb 2021**

- Implemented a Python to WebAssembly compiler for functions, classes, conditionals and iterators
- Coded in JavaScript and implemented features like parsing (using lezer), type-checking and code generation

KeepMeWell, IBM Women in Technology Hackathon, Bangalore, India **Jun 2020**

- My team represented Swiss Re in the India-wide hackathon and were selected as **finalists - top 15 teams** out of 400
- Proposed a product to make information on COVID test centers, hospitals and infrastructure easily available
- Implemented a prototype using the IBM Cloud chat application - Watson | [Video Link](#) | [Github](#)

Accessible Bus Stops for the Visually Impaired, Random Hacks of Kindness Hackathon, Bangalore, India **Aug 2016**

- Built prototype to help visually impaired individuals reach bus stops by making use of Bluetooth beacon
- My team was awarded **best hack** and we presented the project at Kathmandu Mini Maker Faire | [Project Abstract](#)

TEACHING AND VOLUNTEERING EXPERIENCE

• Mentoring students from diverse backgrounds, UCSD (received **Excellence Award** for the same) **Mar 2021 - Present**

• Graduate Women-in-Computing Board Member and K-12 outreach co-chair, UCSD **Jun 2021 - Present**

• Teaching Assistant at UCSD (Client and Server side web development, Analytical writing) **Sep 2020 - Present**

• Community Outreach (CSR) Event Organizer at Swiss Re, Thorogood Associates **2016 - 2020**

• Teacher at NGO 'U&I' and Organizer at National Service Scheme (NSS) **2012 - 2014**