Gautham Pughazhendhi

Portfolio | LinkedIn | GitHub | Kaggle

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Vancouver, BC, Canada

EDUCATION

Master of Data Science candidate, UNIVERSITY OF BRITISH COLUMBIA, Current Overall Grade: A+ Bachelor of Engineering (Computer Science and Engineering), ANNA UNIVERSITY, CGPA: 8.44/10

Sep 2021 — Jun 2022

Jun 2014 — Apr 2018

EXPERIENCE

Software Engineer, Sirius Computer Solutions Inc., India (HQ: San Antonio)

Jun 2018 — Jul 2021

- Built a NLP-based contextual chatbot with smart recommendations for a banking firm to automate the firm's issue creation for internal requests in Salesforce and ServiceNow and reduced the total budgeted manpower cost.
- Developed an email classification **deep learning model using LSTM**, a recurrent neural network(RNN) for a global payments company to **minimize the support team turnaround time** by eliminating the manual categorization of emails.
- Implemented a ticket classification model using a TensorFlow neural network for a healthcare company to group tickets and bring down the workload of support agents.
- **Cut down the allocated workforce cost by 70%** by building multiple **conversational AI assistants** to automate the mission-critical IT operations of a retail MNC; automated the CI/CD pipeline of bots using Azure DevOps and Kubernetes Service.
- Led an initiative with senior AI consultants in enabling my colleagues to work on customer AI projects; taught basic concepts in machine learning and helped in designing the enablement plan.
- Developed a page speed evaluation product using React.js to evaluate the performance of web pages by customizing Google's
 Lighthouse CI project; reduced the page load times by at least 30% of the existing e-commerce customers.
- Built features for OneSource, a **testing automation framework** to enable cloud testing for web and mobile platforms which **reduced the procurement cost of test devices by 50%** by leveraging cloud-based solutions.
- Software Engineer Intern, Sirius Computer Solutions Inc.

Jan 2018 — Mar 2018

- Developed web pages, controllers, and a security module to authenticate and authorize the users of the company for a **security and inventory management application**; **decreased the company's expenditure** on external applications.
- Research Assistant, Velammal Engineering College

Jan 2017 — Apr 2017

 Worked on the design and development of a classroom response system as part of the TIFAC-CORE research group funded by Cognizant Technology Solutions; improved the evaluation model on students' understanding of concepts in my college.

MAJOR ACADEMIC PROJECTS

- FOREST FIRE AREA PREDICTION (Graduate): Built a regression model using Support Vector Regression(SVR) to predict forest fire areas using meteorological and soil moisture data; minimized mean absolute error(MAE) to 8.68 ha with a limited dataset.
- EARTHOSYS (Undergraduate Capstone): Developed an ensemble model using Random Forests to predict tsunamis. Implemented an efficient search algorithm on the NASA dataset to find the nearest coastal distance with coordinates from the NOAA's tsunami dataset. Developed a web application's backend, a chatbot, and an IoT-based alert device using Raspberry Pi. 2017 2018
- CLASSROOM RESPONSE SYSTEM (Undergraduate): Created a client module for a Raspberry Pi based touch-enabled device using PyQt4 and improved client-server communication by replacing HTTP with Constrained Application Protocol (CoAP). 2017

TECHNICAL SKILLS

Languages: Python, R, SQL, JavaScript, Java, CSS, HTML, Swift. Frameworks: Tensorflow, RASA, React, Flask, Django, Angular.

Libraries: Scikit-Learn, Pandas, NumPy, Matplotlib, Keras, SQLAlchemy, PyQt4. Cloud Platforms: Azure, AWS.

Tools: Jupyter, PyCharm, VS Code, RStudio, git, Docker, Android Studio, Xcode, Qt Designer.

HACKATHONS

- HCL Commerce hackathon 2020: Won the Most Creative award with my team for implementing a smart voice assistant to shop on an e-commerce site and integrating it with Google Assistant.
- FLEX 2.0, Codes and Gears 2020, a 36-hour Hackathon, Sirius Computer Solutions (Winners): Built a prototype collaboratively with my team to convert sign language into words on-screen to help differently-abled with speech and hearing loss.

 Demo
- FLEX, Codes and Gears 2019 (Winners): Developed a prototype to detect bad postures, control smart home devices, and convert
 gestures into action words by estimating body poses to help people with disabilities.

 Demo

AWARDS

Feather in the cap 2019; ACE performer of the year 2018 (SIRIUS COMPUTER SOLUTIONS)
First place at IEEE CS Project Expo 2016; Third place at IEEE CS Coding Contest 2016 (VELAMMAL ENGINEERING COLLEGE)