Walstan Baptista

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Software Engineer with extensive experience delivering efficient, scalable & reliable software solutions and expertise in Cloud Technologies. Seeking a full-time opportunity to join a team of talented, like-minded professionals and driving projects forward.

SKILLS

Languages: Python, TypeScript, JavaScript, C/ C++, Java, HTML, CSS/Sass.
Libraries & Frameworks: Django, Flask, Selenium, Pandas, Keras, PyTorch, OpenCV, Numpy, PySpark CUDA, ROS, Vue, React, Node.js.
Database & Tools: MongoDB, NoSQL, SQL, Cassandra, Celery, Redis, ERPNext, GCP, AWS, S3, Kubernetes, Docker, Terraform Linux.
Continuous Integration/Deployment: Jenkins, Travis CI, GitHub Actions.
Certifications: Google Cloud Platform 6 Course Professional Certificate: Cloud Engineering with Google Cloud.
Publications: Demo Abstract: Analyzing CPS Security with Falsification on the Microsoft Flight Simulator.

WORK EXPERIENCE

Graduate Research Assistant, ASU, Tempe, AZ **Jan 2023 – Present**

- Developing and testing software tools like Psy-TaLiRo in python for formal verification and robustness analysis of hybrid systems, with a focus on blackbox models for cyber-physical systems, as part of a research team.
- Setup a scalable automation google drive tool for Archcomp to automate evaluations for submissions.

Application Developer, Solar Canoes Against Deforestation (SCAD), Tempe, AZ **May 2022 – Dec 2022**

- Redesigned the SCAD web-app with a team of 4 using Django and React, enabling users to request rides on mobile devices.
- Revamped the pricing and payment system with Stripe and integrated with OAuth2 authentication for seamless and secure transactions for both riders and drivers, while working closely with stakeholders and the project manager.
- Introduced Infrastructure as Code (IaC) principles using Terraform for managing cloud resources and deployments.
- Implemented a real-time location tracking using Flask-SocketIO and Google Maps API reducing average waiting time by 25%.

Full Stack Software Engineer, Resilient Tech, Vadodara, IN **May 2020 – Aug 2021**

- Raised 60+ innovative GitHub open-source PRs to Frappe / ERPNext fixing over 80 potential issues.
- Enhanced data accuracy and process effectiveness by integrating Frappe ERPNext with 15+ third-party systems, including payment gateways, CRMs, accounting software, and marketing automation tools, utilizing REST APIs and webhooks.
- Led a team of 3 to transfer three apps from on-premise infrastructure to AWS/GCP, resulting in an increase in application scalability and flexibility and a 10% decrease in downtime.
- Communicated with clients and stakeholders to understand requirements and expectations and to provide status updates.

Software Engineer Intern, Resilient Tech, Vadodara, IN **Jan 2020 – May 2020**

- Collaborated with cross-functional teams to develop and implement 15+ customized applications and modules using Python, Frappe, Django, and Flask frameworks, with their unit tests.
- Built and modified 25+ forms, reports, and dashboards with Frappe and integrated it with front-end technologies such as HTML, CSS, and JavaScript, automating processes, resulting in a 30% improvement in data accessibility and decision-making.

PROJECTS

QuadDrop / Shravas Drone Delivery System

- Collaborated on designing autonomous drone flight architecture with facial tracking, object detection, and QR-code scanning with OpenCV in Python and ROS Kinetic, resulting in fleet automation of 12 drones with an interactive web GUI.
- Received government funding of ₹11,250 INR through Student Startup and Innovation Policy (SSIP).

Automated Job Application Software

- Developed an automated job application system hosted on local system using Selenium and Docker, resulting in a significant reduction in time and effort required for job application submissions, built in Python.

Sports Predictive Analytics Model

- Built a Sports Predictive Analytics Website using Flask and XG Boost, with data visualization tools to help users gain insights to team performance enabling users to predict outcomes of sports events accurately.

Autonomous Driving in CARLA

- Implemented a Deep Q learning model for autonomous driving with a team of 4, using the CARLA simulator in Python and demonstrated results through real-time simulations and reward policy performance evaluations.

EDUCATION

Arizona State University, Master of Science – Artificial Intelligence CSE **May 2023**
School of Computing & Augmented Intelligence (SCAI) (GPA 3.8 / 4.0) Tempe, AZ

Gujarat Technological University, Bachelor of Engineering in Computer Science & Engineering **Sep 2020**
Institute of Technology BITS Edu Campus (CGPA 8.4 / 10.0) Vadodara, India

HONORS & ACTIVITIES

- Awarded Student Startup and Innovation Policy (SSIP) Grant from the Government of Gujarat.
- Volunteered & coordinated multiple international student CIS events at ASU.
- Secured 1st place at SVIT National Level Tech Symposium.
- Managed & coordinated college-level 'Aptitude Tests' for 4 years.