SARA VAGNARELLI

Software Engineer

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○ github.com/saravgn   saravagnarelli.com   💼 Work authorization: US Green Card, EU Citizenship, Australian Citizenship

EXPERIENCE

Software Development Engineer II
Amazon

🗓 April 2021 - Present   ⚲ New York, NY, USA

- Contribute to a cross-functional team on projects designed to mitigate the impact of COVID-19 on grocery shopping, enhancing online customer experiences, supply chain efficiency, and customer retention through innovative solutions and advanced analytics.

Senior Software Engineer
Deckard Technologies

🗓 Aug 2018 - Jan 2021   ⚲ Sydney, Australia

- Developed analytical reporting systems to enhance local government operations and smart city growth. Spearheaded backend development and engineered CI/CD and ETL pipelines using Python, AWS, React, PySpark, and Docker, enhancing data processing efficiency by 30% and reducing system downtime by 20%.

Software Engineer
Qualcomm

🗓 Nov 2016 - May 2018   ⚲ Sydney, Australia

- Designed and implemented the DIRB System, improving counterfeit device identification and registration processes by 60%, significantly boosting compliance and security.
- Developed and optimized Python and SQL code, enhancing data processing and analytical efficiency by 50%.
- Created RESTful APIs, enabling a 40% improvement in data exchange and integration efficiency across analytics-driven applications.

Software Engineer
Accenture

🗓 Sep 2015 - Apr 2016   ⚲ Rome, Italy

- Joined software development team working in Java and SQL for a variety of clients. My role was primarily optimising in-house process including coordinating testing activities and automating processes execution

Research Fellow
New York University

🗓 Nov 2014 - May 2015   ⚲ New York, NY, USA

- Conducted a joint research project on autonomous navigation and mapping in GPS-denied environments with Full Professor Chee Yap. Focused on the development of advanced algorithms for drone quadcopters, enabling real-time mapping using a monocular camera through VISUAL SLAM techniques.
- Designed and developed image processing APIs in C/C++, enhancing object recognition capabilities using the OpenCV library.

SUMMARY

I hold Bachelor's and Master's degrees in Computer Science and Engineering, with over 9 years of professional experience as a Software Engineer. I am passionate about exploring new technologies, yet I remain technology-agnostic to ensure the selection of the most effective solutions. I am seeking a challenging role that fosters change and offers significant opportunities for career advancement.

EDUCATION

M.S. in Computer Science and Engineering
Roma Tre University, Italy

🗓 Oct 2012 - May 2015

B.S. in Computer Science and Engineering
Roma Tre University, Italy

🗓 Oct 2009 - May 2012

Deep Learning Nanodegree
Udacity

🗓 Jan 2018 - Present

Full Stack Web Dev Nanodegree
Udacity

🗓 May 2016 - Sept 2016

PROJECT EXPERIENCE

Dog-Breed Classifier
github.com/saravgn/dogbreedclassifier
Designed and trained a CNN to identify dog breeds. Applied Transfer Learning to improve the model. **Keras, NumPy, VGG-16, ResNet-50, Scikit-learn**

Sentiment Classification
github.com/saravgn/sentimentclassifier
Predict sentiment from movie reviews. **NumPy, Scikit-Learn**

Predicting Bike Sharing Data
github.com/saravgn/bikesharingpred
Built and trained a Neural Network from scratch to predict the number of bike-share users on a given day. **NumPy**

EXPERIENCE

Software Engineering Intern

Roma Tre University

📅 Dec 2011 - May 2012   📍 Rome, Italy

- Developed Android-based software for geolocating radar maps, aimed at accurately identifying underground compositions through real-time data processing.
- Integrated advanced geospatial analysis techniques with Android development tools to enable precise mapping and analysis of subsurface materials.

CERTS AND AWARDS

- **SheHacks-Sydney 2019**: Awarded for Best DataScience App linkedin.com/saravagnarelli-shehacks-sydney-2019-hackathon
- **CLOUDERA, Data Analyst Fundamentals** of data ETL (extract, transform, load), ingestion, and processing with **Hadoop** tools and how **Pig**, **Hive**, and **Impala** improve productivity for typical analysis tasks.
- **C++ programming course**
- **Academic Language Certificates** English: TOEFL, IELTS, PTE, BULATS, FIRST, KET, PET Spanish: DELE Cervantes, Camino Barcelona

LANGUAGES/HOBBIES

- Gen AI playground on huggingface.co
- 3D printing **ED-209**
- Hacking Arduino 4-wheel Robot
- Travelling

English, Italian
Spanish

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Team: Volleyball, Dance, Karate
Instruments: Piano and Flute