



Aleandro Presta

✉ Email: aleandro.presta@outlook.com ☎ Phone: (+43) 67761639121

🌐 Website: <https://github.com/AleandroPresta>

🌐 Website: <https://www.linkedin.com/in/aleandro-presta-6523471b9/>

Date of birth: 24/07/1996 Nationality: Italian, German

WORK EXPERIENCE

[04/2024 – 04/2025]

university research assistant

Università della Calabria

City: Rende | Country: Italy

- **Developed Workflow Designer:** Designed and implemented a workflow designer for creating and deploying complex applications in the domains of Industrial IoT and Urban Mobility, streamlining application development.
- **Contributed to Scientific Publications:** Participated in the writing and development of scientific papers focused on the Edge Cloud Continuum, exploring innovative solutions for distributed computing and data processing.
- **Analyzed Edge Cloud Architectures:** Conducted literature reviews and collaborated on the analysis of Edge Cloud Continuum architectures to support efficient and scalable data-driven applications.
- **Explored AWS Ecosystem:** Gained hands-on experience with key AWS offerings, including EC2, S3, Lambda, and RDS, to understand cloud-based infrastructure and application development.

EDUCATION AND TRAINING

[09/2020 – 04/2024]

Master's Degree In Software Engineering

Università della Calabria

City: Rende | Country: Italy |

[09/2015 – 09/2020]

Bachelor's Degree in Software Engineering

Università della Calabria

City: Rende | Country: Italy |

LANGUAGE SKILLS

Mother tongue(s): Italian

Other language(s):

English

LISTENING C1 READING C1 WRITING B2

SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2

German

LISTENING B1 READING B1 WRITING B1

SPOKEN PRODUCTION B1 SPOKEN INTERACTION B1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

My Digital Skills

Programming Languages

Java | Python | Scala | C

Web Development

HTML | JavaScript | CSS | Angular | Java Spring Boot | Django | Bootstrap

Machine Learning and Big Data

Apache Spark | Tensorflow | PyTorch | Scikit-learn

Databases

PostgreSQL | MySQL

Other Tools

Linux | Docker | Git | Arduino | Amazon Webservices

PROJECTS

[09/2024 – Current]

Hotel Management System (Angular, Bootstrap, HTML, CSS, JavaScript)

- **Advanced Hotel Management:** Developed a front-end application for managing hotel operations using Angular.
- **Responsive UI:** Created a responsive and interactive user interface with Bootstrap and PrimeNG.
- **User Authentication:** Added secure user authentication and role-based access control.
- **Admin Dashboard:** Created an admin dashboard for managing rooms, bookings, and users.

Link: <https://aleandropresta.github.io/hms-frontend-v2/>

[06/2024 – 07/2024]

Articles Web Application (HTML, CSS, JavaScript, Bootstrap, Python, Django)

- Developed a web application using Django and Bootstrap for seamless user registration, authentication, and article management.
- Implemented responsive design principles with Bootstrap to ensure optimal performance across various devices and screen sizes.
- Enabled users to create, edit, and delete articles, enhancing content management capabilities
- Enabled users to comment articles to foster user engagement and interaction.

Link: <https://github.com/AleandroPresta/articles-webapp>

[11/2022 – 01/2023]

Development of a VS Code Extension using the Agile methodology (SCRUM, Typescript, JavaScript)

Implemented core features such as IntelliSense, code snippets, and syntax highlighting using TypeScript and JavaScript.

Led Agile (Scrum) Development: Collaborated within a Scrum team, facilitating sprint planning, daily stand-ups, and retrospectives to ensure continuous delivery and improvement of the extension.

Enhanced Developer Experience: Designed and integrated intuitive code snippets and auto-completion capabilities, improving the productivity and coding experience of users.

Link: <https://github.com/pierpaolosestito-dev/ASPEditorPlugin>

[09/2023 – 11/2023]

Face Generation through Diffusion Models (Python, PyTorch)

- Conducted a thorough review of existing literature and research on diffusion models and their applications in image synthesis, laying a solid theoretical foundation for the project.
- Implemented a Diffusion Model in PyTorch to generate lifelike human faces, leveraging a dataset of 10,000 images.

- [02/2023 – 03/2023]

Deep Learning Predictor for Fungus Image Classification (Python, Tensorflow, Keras)
 - Developed an advanced deep learning model using TensorFlow for classifying fungus images into ten categories.
 - Prepared and preprocessed the dataset, including resizing, normalizing, and augmenting images to enhance model generalizability.
 - Built a CNN by extending pre-trained models VGG16 and ResNet50 using transfer learning to improve classification accuracy.
- [05/2021 – 06/2021]

Predictive Modeling for Heart Disease (Python, NumPy, Pandas, Matplotlib, Seaborn, Scikit-learn)
 - Conducted an in-depth analysis of a dataset containing diverse patient information using NumPy and Pandas, including data cleaning, preprocessing, and feature engineering to extract key insights related to cardiovascular disease risk.
 - Utilized Matplotlib and Seaborn to present analysis results through histograms, box plots, heatmaps, and scatter plots, identifying patterns and correlations.
 - Trained several machine learning algorithms with Scikit-learn, including Decision Trees, Random Forest, Logistic Regression, SVM, KNN, and Naive Bayes, involving data splitting and hyperparameter tuning for optimal performance.
 - Evaluated models using performance metrics such as Accuracy, Precision, Recall, and F1-Score, with Cross-Validation and ROC Curves/AUC to ensure robustness and effective classification.
 - Compared model performance to identify the best one, validated the final model on a separate validation set to ensure generalizability.

PUBLICATIONS

- [2024]

L. Belcastro, F. Marozzo, A. Presta, R. Varchera, A. Vinci, "Developing Platform-Agnostic IIoT Applications in Edge-Cloud Environments". International Conference on Industry 4.0 & Smart Manufacturing 2024 (ISM 2024), 2024
- [2024]

F. Marozzo, A. Presta, R. Varchera, A. Vinci, "Estimating performances of Application Deployment on Distributed IoT-Edge-Cloud Infrastructures". 22nd IEEE International Conference on Pervasive Intelligence and Computing (PICom 2024), 2024
- [2024]

[L. Belcastro, F. Marozzo, A. Presta, D. Talia, "A Spark-based Task Allocation Solution for Machine Learning in the Edge-Cloud Continuum". 20th International Conference on Distributed Computing in Smart Systems and the Internet of Things \(DCOSS-IoT\), 2024](#)