KYRIACOS ANTONIADES

CURRICULUM VITAE

PROFILE

An accomplished business operations and systems manager with long-standing expertise in multi-criteria decision analysis (MCDA) and mathematical programming (MP). With experience as a software engineer, masters a wide range of programming and scripting languages. He has completed and made the impact of achievement on several projects' aim and objectives. By following functional policies, he has gained extensive writing skills in preparing technical and user documents in strategy, requirements, and specifications, establish practices and procedures, assure quality standards, and management of project schedules.

As a research associate, he implements a multi-criteria decision support system for Unmanned Air Vehicle (UAV) maritime surveillance in a highly dynamic environment - Solving a multi-robot routing problem. As an entrepreneur, he wins the United Kingdom's (UK) Centre for Defense Enterprise (CDE) competition for a Proof-of-Concept (PoC) System-on-Chip (SoC) prototype. The prototype enables single operator command and control (CC) of an autonomous multi-robot system, for swarm target detection and routing - Solving a multi-robot allocation problem. As a partner, he develops a cloud application for asbestos analysts' performance management together with asbestos air-sampling slide referencing system. It is further integrated with an intelligent e-Learning Management System (LMS) to provide recommendations on individual analysts' measurement accuracy – Solving a quality standard statistical problem. As a consultant for a group of businesses, he manages business flows, promotion, database development, micro-services customization, change-over and implementation – solving an IT operations and metrics problem.

Furthermore, with over 20 years of teaching/lecturing experience at various Universities, colleges, and vocational training centres, he teaches a broad range of subjects from networks, web development, e-commerce/governments, programming languages, applications software, to MCDA, and, business operations, management, and statistics, as well as design methods. He articulates complex ideas clearly and concisely.

Moreover, he has an M.Sc. in Computer Science. In his thesis, he develops a desktop application for a "Prototype Decision Support System (DSS) using the Analytic Hierarchy Process (AHP)". He has a B.Sc. in Applied Physics with thesis research into the "Fall-out-effects of the Chernobyl Accident".

In his disciplines, as an author and reviewer; he has several publications in high impact conference/journals to showcase.

Other research pursued at a doctoral level includes semiconductor physics and quantum mechanics.

On a master's level, these include microelectronics/information engineering, medical imaging, and computer-aided design/manufacturing.

He has taken roles as a data analyst and data scientist. An active data engineer builds services for the development of Artificial Intelligence (AI) algorithms on the python ecosphere and frameworks. He knows version control systems, container image repositories, as well as database, WordPress, and Moodle administration. He enjoys analyzing data and extract insights to make recommendations.

Currently as an Infrastructure / Platform / Software / Container as a Service Engineer (IaaS / PaaS / SaaS / CaaS), he is involved with Continuous Integration / Continuous Development (CI / CD) of cloud applications / services. These are orchestrated on Kubernetes architectures to improve Container as a Service (CaaS) configuration paradigms. The CaaS environments are integrated and customized with a variety state-of-the-art computer vision (CV), machine/deep learning (ML/DL) and natural language processing (NLP) algorithms, encompassing latest research and experimental methodologies.

His start-up Learning Management System (LMS) / Blog web site at:

https://ai-systems.today

Envisions his aim for developing an LMS for those interested in the advancement and experimentation of current methodologies and techniques to implement CI / CD of AI (CV / ML / DL / NLP) algorithms.

Primary research concerns the pervasive object detection, recognition, tracking of video, voice, and text processes on ubiquitous devices. Some of the novel projects in his portfolio include face detection, recognition (identity, gender, age, emotions), and tracking (landmarks).

In the future, he plans for the development of a non-intrusive video/camera lie detector application, by training on facial micro-expressions. Besides, the LMS (Moodle) integrates an autonomous user bot with Reinforcement Learning (RL) capabilities.

The objective is for the bots to learn, adapt, and seek to understand users' individual needs hence further augment their learning/training and creative potential. In effect, it improves learning with deep learning. It allows Continuous Learning (CL) on AI (CV / ML / DL / RL / NLP) algorithms by integrating RL in LMS.

The Blog web site (WordPress), on the other hand, provides feed updates on the most recent developments, research, and experiments on the AI (CV / ML / DL / RL / NLP) methodologies.

To gain a competitive advantage, both Moodle and WordPress are further integrated with a JupyterHub on Azure Kubernetes to serve Jupyter notebooks for multiple users. Used in classes of students/lecturers, corporate data science or scientific research groups, it allows multi-user sharing and collaboration of code in real-time, pre-configured with a variety of python modules and packages.

He knows that he has a high level of business acumen, with an entrepreneurial attitude that he has put in practice many times throughout his career. Proactive, he can simultaneously take own initiative as well as act as a team player. Highly motivated, he achieves target aim and objectives with a track record of success.

Throughout, he has been gradually evolving, accumulating a wide range of skills in multi-disciplinary areas of business entrepreneurship, applied and data sciences, AI engineering, CaaS administration, and active research in decision analysis with AI operations systems integrations.