CURRICULUM VITAE

Position:			
Personal information	Name: Nguyen Tuan Anh	Date of birth: Nov 02, 1981	
	Professional qualifications: • Phd Communications and Information technology • Master Computer Science		
Current job	Employer:		
	Company: FUYU PRECISION COMPONENT CO., LTD. Address: Lot M1 and Lot F, Quang Chau Industrial Park, Van Trung Commune, Viet Yen District, Bac Giang Province, Vietnam		
	Position: AI Leader / Manager	Years with present Employer: 3	

<u>**Here are some key highlights:**</u>

Academic Foundation and Teaching Experience

- Ph.D. in Communications and Information Technology
- Master's degree in computer science
- Lecturer at Thai Nguyen University of Technology
- Published 11 research papers in Speech Recognition and Deep Learning

AI and Computer Vision Project Implementation

- Over 3 years as AI Leader, leading AI projects for a global smart factory.
- Lots of experience in applying AI in identifying product appearance errors.
- Directly code most work-related projects to ensure program stability, accuracy and streamlining.
- R&D experience in fingerprint recognition, object detection, face, and voice recognition.
- Implemented AI system for candidate-job matching on a professional recruitment platform.
- Developed multilingual video dubbing application using STT and TTS technologies.

Programming Skills and Project Management

- Proficient in Python, C++, Flask, and various software development tools
- Experience with Git, Docker, and modern software development practices.
- Led teams, assigned tasks, integrated AI projects.
- System design, main coding responsibilities, project documentation

AI Applications for Data Analysis and Decision Support

- Deployed Lean Learning Machine (LLM) system for factory log data analysis.
- Created querying and recommendation systems to extract production and personnel insights.
- Implemented real-time monitoring and decision support features to enhance operational efficiency.

PROFESSIONAL EXPERIENCE STATEMENT

From	To	Company/Project/Position/Relevant professional and management experience
2/2022	Date	**Company: FUYU PRECISION COMPONENT CO., LTD.** **- Position:** AI LEADER, Chief Technical **- Projects** Build a global WEF smart factory[1]: • Led & code AI projects for a global WEF smart factory, focusing on: • AI-enabled order forecasting and supply chain planning • Real-time shop floor compliance management with panoramic AI vision • Research and development of AI-PINN technology for enhanced quality and efficiency. • LLM-enabled failure log analysis and anomaly handling • Developed AI programs integrated with factory data and automated machinery, leveraging: • Data integration from factory systems • Automation machinery interfaces • Web development for comprehensive report visualization **- Project: AI CVs-JDs Matching System Development** • Developed AI algorithms to facilitate candidate and recruiter matching within a professional web recruitment platform. • Implemented advanced search and matching functionalities to optimize candidate-job fit. • Enhanced system efficiency by integrating machine learning techniques for improved candidate recommendations. **- Project: Multilingual Video Dubbing Application Development** • Engineered language conversion functionalities for transforming instructional videos into multilingual content. • Designed and implemented Text-to-Speech (TTS) and Speech-to-Text (STT) algorithms to facilitate seamless dubbing across languages. • Ensured high-quality output through rigorous testing and optimization of dubbing processes. **- Project: LLM Integration for Factory Data Analysis** • Developed and deployed a Lean Learning Machine (LLM) application for factory operations. • Created querying and recommendation systems to analyze factory log data and extract insights related to production, personnel, and other relevant factors. • Implemented features for real-time monitoring and decision support, enhancing overall operational efficiency and productivity. **- Projects**: Product appearance inspection, a list of hundreds of projects embedded in a software called IVIS (Intelligent Visual Inspection System), has integrated inspection of up to 50 different types of products in one software. Some examples about: **IVIS for Visual Inspection:** • Check the appearance of the final product (Check if each type of product, the packaging is correct, the labeling is not deviated, there are enough labels, ...) • Check the packaging process (Check if the worker's operation is correct or not, put enough components and accessories, ...)

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[1] Build a global WEF smart factory report:

From	To	Company/Project/Position/Relevant professional and management experience
		• Check bonded with the volume (Check if the weight of each product matches the requirements, the weight of which MAC code, attached to which product, ...) • Check the appearance for accuracy (Check whether the product is affixed with the correct type of label, components and accessories placed in the box are correct for that product, ...) • Check the product function appearance (Check whether the light is working or not, the indicator light is correct with the function test scenario, the indicator light can be controlled, ...) • Monitor and evaluate worker capacity (Supervise working workers, assess the speed of product completion, assess worker qualifications, assess the accuracy of worker manipulations compared to SOP, ...) • Security monitoring of prohibited areas (Monitoring prohibited areas by camera and alerting to enforcement devices) • Product quality inspection (Checking for defects in appearance and counting the number of products and components while running on the line) … **Some KYC related projects:** - Fingerprint recognition via Camera (Image processing and multiple fingerprint recognition through phone camera images) - Voice recognition (speech classification, distinguishing between different people through voice) - Face recognition (regular face or wearing mask, eyeglasses) **Tools and managements:** - Material management system (material information management, material ordering management, material supply) - Support systems to optimize PM's data forecasting process - Management systems and analysis of product log systems and product errors - Lean management project to manage production origins - **Responsibility:** • Lead team, • System design, • Project documentation, • Task assignment of members, • Main coding person, • Integration of members' small projects to form an AI bonded inspection system. - **Techstack:** Using Python, Tkinter, Yolo to create bond recognition software, in addition, full-stack code using Flask, …
9/2016	12/2019	**Company: GRG Banking Equipment Co., Ltd. Guangzhou, China** - **Position:** AI R&D - **Project:** • R&D on fingerprint recognition for time attendance system • R&D on Object Detection for ATM anomaly recognition system • R&D on Object Checking for subway automatic entrance and exit tracking system.

From	To	Company/Project/Position/Relevant professional and management experience
		- **Responsibility:** • Programming and data processing skills. • Research and technical problem-solving skills. • Knowledge of Computer Vision and Machine Learning. • Experience in developing object recognition and tracking systems. • Use popular libraries and frameworks like OpenCV, TensorFlow, PyTorch, and Keras. • Ability to work independently and in a team, communication, and presentation skills, … - **Techstack:** 1. **Programming Languages**: Python, C++ 2. **Libraries and Frameworks**: OpenCV, TensorFlow, PyTorch, Keras 3. **Machine Learning and Computer Vision Algorithms**: CNNs, RNNs, Transfer Learning, Feature Extraction Techniques 4. **Development Tools**: Jupyter Notebooks, Git, Docker 5. **Other Tools and Technologies**: IDEs (PyCharm, VSCode, JupyterLab), Data Processing Libraries (NumPy, pandas, scikit-learn), Image Annotation Tools (LabelImg, VGG Image Annotator, COCO Annotator)
9/2016	12/2019	Company: South China University of Technology, Guangzhou, China - **Position:** PhD. RESEARCHER - **Project:** • PhD student in the field of Speech Recognition • Research other areas: related to Speech, Image, and Deep Learning. • Publish 11 scientific research articles 　　　　　　　　　　　　　　　　　　) - **Responsibility:** 　+ Research new tectnology
7/2005	12/2022	Company: Thai Nguyen University of Technology, Vietnam - **Position:** University Lecturer - **Project:** Teaching about Computer Engineering (C/C++, C#, Python, Micro controller – Micro processor, Embedded system, Machine learning – Deeplearning, AI application…) - **Responsibility:** Teaching subjects related to hardware, software, embedded software, and AI.