

Yue Zheng

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Nationality: British, with BPSS
Languages: English (fluent), Mandarin (native)
Driving: Full clean UK driving licence

SUMMARY:

Skilled software engineer with 7 years' commercial experiences and 5 years' academic experiences in C++, C and Python programming languages developing high reliability real time complex systems on both Windows and Linux platform. I have worked on numerous projects from concept to completion using both waterfall and agile methodologies. I am a quick learner, can work without supervision, research myself and learn things. I have strong academic background in electronics and software, deep knowledge with algorithm development, data modelling, digital signal/image processing, machine learning and computer vision. I also have experience of working in a wide variety of roles, from analysing business requirements to technical analysis of systems and data.

PROFESSIONAL EXPERIENCES:

06/16 ~ Now: Cabot Communications Ltd, Kingswood, Bristol

- Smart TV related development, multi-threaded using embedded Linux & C++, design patterns, state-machines and TDD.
- Design and implementation of conditional access CI+1.4 features under ETSI standard requirements and protocol stack development in a multi-threaded system using C++, STL, OOD, state machine and design patterns.
- Understands the challenges of real-time programming and is able to implement solutions using multiple threads and synchronisation tools such as mutexes and condition variables.
- Extending and adding new protocol messages (PDUs) on command interface to support new features.
- Employs good software engineering practice including reusable, modular design and software lifecycle management (agile). Familiar with tools such as UML, version control (SVN), debugging and testing.
- Investigate issues, bug fixes and worked with standard organization for product conformance.

11/12 ~ 05/16: Software Engineer, Simulation Systems Ltd, Yatton, Bristol

- Responsible for developing various software applications (such as a GNU/Linux-based Message Sign Control system, Win32-based Message Sign Controller) for highways control system using C++.
- Experience of working in full software development life cycle (waterfall) involving requirement, design, development, testing and documentation.
- Communications and user interface design (RS485, Ethernet, TCP/IP etc) used object-oriented design (with UML) as well as Boost and Qt libraries.
- Excellent technical document and report writing capabilities.
- Excellent analytical, problem solving, technical, interpersonal, and communication skills.
- Ability to work well in both, team environment and individual environment.

05/10 ~ 10/12: Enterprise Service Manager, Huawei Technologies (UK) Ltd, Basingstoke

- Gathering and analyzing customer requirement, lead project team to design and write

business proposals for tendering.

- Attending dialogue meeting to present business solution, clarify customers queries, and contract negotiation.
- Experience in project management of various complexity projects.
- Experience in business analysis and client relationship management.
- Winning projects worth £60M: Included BTGS CPE Resale; Italy Vodafone CPE Resale; Janet IP; China Telecom London Olympics Assurance; Phoenix VDI; China Mobile VoIP, etc.

03/09 ~ 02/10: Researcher, School of Electronics Engineering, Cardiff University

- Captured real-time human motion data (3D) using Phasespace motion digitizer system and developed several effective algorithms for tracking motion of a real person in video.
- Developed a novel technique that splits the complex human motion data in an automated way, this method enhances the tracking capabilities of the algorithm.
- Developed a new approach which uses windowed trellis algorithm for generating real-time interactive human behaviours of virtual characters.
- Working on Microsoft Windows platforms using Matlab and C++.

EDUCATION:

10/04 ~ 12/08: PhD in Electronics Engineering and Computer Science, Cardiff University

Dissertation: "Modelling, Tracking and Generating Human Interactive Behaviours in Real Video". The research presents novel model-based approaches to create a three dimensional (3D) virtual interactive character. In other words, it can respond in a realistic and sensible manner to actions of a real person in video. I have developed a virtual character generating system, and demonstrated successfully using MATLAB and C++. This system tracks and analyses the behaviour of a real person in a video input and thereby produces a fully articulated 3D character interacting with the person in the video input. I also have strong knowledge with algorithm development, data modelling, digital signal/image processing, and computer vision.

09/01 ~ 07/04: BEng (Hons) 1st in Electronics Engineering in Digital Communication, University of Central Lancashire, UK

Core subjects: Mathematics, Electronics, Digital Signal Processing, Digital Image Processing, Data Communication, Artificial Neural Network, Program design and implementation, PCB Design, Project Management, etc.

Final year project was Image Fusion Based on Wavelet Transform. This work includes design user interface (MFC), implement three image fusion methods and applied to real images using Visual C++.

KEY SKILLS:

Programming Language: C, C++, Python, Matlab

Object Oriented Analysis and Design: Agile, Scrum, Kanban

Software configuration: SVN, GIT

Applications: MS Word, Excel, PowerPoint, Visio, Project; Adobe Photoshop, Latex

Development Tools: GCC, GDB, VM Ware, Jenkins, Wireshark, Eclipse, Visual Studio Code, Visual Studio 2015, Tera Term

Story and Bugs management: JIRA

Protocols: TCP/IP, UDP, ICMP

Operating Systems: Windows 10, Ubuntu 14.04, Ubuntu 18.04

REFERENCES:

Will be provided on request