LONG CHEN

Personal Details

Name:	Long CHEN
Date of Birth:	20/August/1990
Nationality:	Chinese
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Education

Oct.2015– present   **Bournemouth University (BU), Bournemouth, U.K.**
PhD Student in Department of Creative Technology
Research Interest: AR in Medicine, Image Guided Minimally Invasive Surgery, SLAM/SfM

Oct.2013– Oct.2014   **University College London (UCL), London, U.K.**
Department of Medical Physics and Bioengineering
Major: MSc in Physics and Engineering in Medicine (Medical Image Computing Stream)
GPA: Distinction (10%)
Main Courses: Programming Foundations for Medical Image Analysis, Medical Image Ionising and Non-Ionising, Computational Modelling for Biomedical Imaging, Ionising Radiation Physics

Sep.2009– Jun.2013   **Dalian University of Technology (DUT), Dalian, China**
Department of Biomedical Engineering
Major: Bachelor in Biomedical Engineering
Main Courses: Basic Biology, Clinical Medicine, Electronics Circuits, Signal Processing, Image Processing

Work Experience

Jul.2017 – present   **Department of Creative Technology, Bournemouth University, U.K.**
Title: Research Assistant
Develop AR research platform based on Unity.

Feb.2015 – Oct.2015   **R&D Centre, Toshiba Medical System (China), Beijing, China**
Title: Software Engineer
My responsibility is to analysis, design and develop functional diagnostic applications for Toshiba's Medical Image Workstation.

Nov.2014 – Jan.2015   **GE Healthcare, Beijing, China**
Title: Advanced Application Intern
My primary task is to develop the registration module for DCE-MRI diagnostic software using C++. Implement and evaluate different registration algorithms for 3D DCE-MRI and Perfusion CT image sequences.

Research Experience

June 2016   **Augmented Reality for Minimally Invasive Surgery Guidance**
By using SLAM and stereo vision system, the structure in the abdominal cavity can be reconstructed, which enables advance augmented reality applications such as drawing notations, mapping anatomic structures, the location of vessels tumours etc.

June 2014   **Characterizing the Origin of the Arterial Spin Labelling Signal in MRI**
Bi-exponential fitting of the Transverse Decay (signal vs echo time) to investigate the intra to extra-cellular ratio of the extra-vascular ASL signal which would change in stroke and brain tumours.

Dec. 2013   **Brain Image Multi-Atlas Segmentation and Registration**
Estimate the Segment of brain MR image of grey matter, white matter and cerebral-spinal fluid by GroupWise registration to atlas mean space.

Apr. 2013   **DCE-MRI Sequences Non-rigid Registration Research**
Investigate and implement non-rigid registration algorithms to align breast DCE-MRI sequences by feature point matching and Thin-plate Spline registration.

Skills & Knowledge

Communication: IELTS: 7 Chinese (Native); Excellent in writing and speaking English Fluent at Office Software

Programming: Proficient at MATLAB Signal Processing, 2D/3D Medical Image, Segmentation, Registration, and interpolating algorithms.
Good at C/C++ Programing, experienced with ITK, MITK, VTK, DVTK, NIfTI.
JavaScript, Python, Unity and Unreal game engine

Specialized Knowledge: Basic Biology and Medical knowledge
Imaging principle of ultrasound, X-Ray, CT, MRI, fMRI, PET
DICOM Standard and Medical Image processing algorithms

Activities & Honours

Oct. 2015   BU PhD Scholarship Funding
Oct. 2014   UCL Graduate with Distinction
Jun. 2013   DUT Excellent Graduation Thesis
Jun. 2012   Second Prize of Mindray Marketing Research
Jun. 2011   Team leader of Mindray Innovation Club
Oct. 2010   Scholarship of Social Practice in DUT
Sep. 2010   Vice-President of DUT Student Union