## **Mincong Zhang**

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WORK Factset Europe Ltd

Jan-now, 2015

Working in Market Data department

Real time market data with C++, Boost and multithreading

**EDUCATION** University College London

2013-2014

MSc Computer Graphics, Vision and Imaging

Queen Mary, University of London

2009-2013

Jun-Dec, 2014

& Beijing University of Posts and Telecommunications

BSc Telecommunications Engineering with Management

Double-degree, First Class Honours

**INTERNSHIP** 

3D Industri.es (a 3D retrieval/printing startup company)

Part-time: helped to improving a 3D retrieval system

- Experimented a 'partial-search' 3D retrieval system

MSc final project: Built a experimental 3D retrieval system

- A shape-based retrieval system, which provides a scan-to-search solution
- Used spherical harmonics and shape histograms to describe 3D shapes
- With C++, MFC, OpenGL, OpenMesh
- Repo: github.com/mincongzhang/3D\_Retrieval\_scan2search

#### Ericsson - Region North East Asia (RNEA)

Apr-Aug, 2013

Worked in a Cross Function Team in Development Unit for IP & Broadband department

• Project on PT router

Imported a web server (based on https protocol) into PT router

- I developed the frontend website framework
- Including login, main pages, Data Communication Network (DCN) page and Software Download (SWDL) page
- Applied Ajax and Json, and focused on the cross-browser ability
- Project on IP Operating System (IPOS)

White box test for IPOS

- Unit test: applied Google C++ Testing Framework
- Project on SP switch

Black box test for Quality of Service (QoS)

- Perl scripting to verify the Congestion Avoidance functions on SP switch

## **HACKATHON**

## J.P. Morgan and the Code for Good Challenge

Nov, 2013

An android app to collect customer information for micro-finance firms, including Client Registrations, Group Registrations, Loan Applications and Offline Mode

- I developed the frontend User Interface of the Group Registrations
- Joint runners-up team

#### RESEARCH

# Undergraduate Final Project: The influence of amplifier settings on the perception of 'heaviness' in guitar timbre Nov. 2013

Aims to objectively measure the relationship between amplifier settings and the perception of 'heaviness'

- More than 900 registered users from UK and China participated in the final web-based listening test
- Supported by 2 supervisors from Centre for Digital Music in Queen Mary, University of London
- Results contribute to the fields of emotion detection in music and genre
- Involving:Python scripting, website construction (Django), database (SQLite), signal processing (Matlab), Algorithm design
- Repo: github.com/mincongzhang/UnderGradFinalProject

#### **PROJECTS**

#### **Machine Vision**

2013-2014

- Realtime augmented reality
- Apple Detection (EM algorithm), Panorama, etc.
- Repo: github.com/mincongzhang/MachineVision

### **Acquisition and Processing of 3D Geometry**

2013-2014

- Sketch-to-search 3D retrieval system
- ICP alignment/Mesh denoising system
- Repo: github.com/mincongzhang/3DGeometry

#### **Computer Graphics**

2013-2014

- Sketch-to-search 3D retrieval system
- Implemented Ray Tracing, Clipping, Robot modelling and Splines
- Repo: github.com/mincongzhang/ComputerGraphics

#### **Image Processing**

2013-2014

- Face Detection & Poission Editing
- Repo: github.com/mincongzhang/ImageProcessing

#### **Advanced Transforms**

2011-2012

- Wavelet/Fast Fourier transform
- Repo: github.com/mincongzhang/Toolbox/tree/master/AdvancedTransform

## **POSITIONS**

- Staff in IT department of Chinese Students and Scholars Association at UCL Union 2013-2014
  - Managed the CSSA website and WeChat public platform
- Vice president of the Animation & the Guitar Societies

2010-2011

- Both of the societies won the title of Top Five Associations
- In charge of the Student-Staff Liaison Committee(with university staff in Beijing and London) 2009-2010

#### **SKILLS**

C++, OpenGL/OpenMesh, Boost, Python, Perl, Matlab

## INTERESTS

Guitar (5 years), Animation, Tennis, Jitsu