

Yufeng Geng

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EDUCATION

- Peking University**, School of Electronics Engineering and Computer Science, Beijing 2013.9-Present
M.S. in Computer Applied Technology, Grade:86.32/100
- Peking University**, School of Electronics Engineering and Computer Science, Beijing 2009.9-2013.7
B.S. in Computer Science, GPA:3.46/4.0
B.S. in Economy

PROJECTS

UEP for Video Streaming 2014.10—2015.2
Peking University

- Established the mathematics model of an FEC redundancy allocation approach. Transformed it as an optimization problem and resolved it with a suboptimal hill-climbing scheme.
- Implemented a Matlab demo system which simulates the video codec (with JM18), our proposed FEC codec and network transmission with packet loss.
- The PSNR performance was improved by more than 5 dB.
- Paper*: Yufeng Geng, Xinggong Zhang, Chao Zhou, Zongming Guo, Unequal Error Protection For Real-time Video Streaming Using Expanding Window Reed-Solomon Code, Accepted by ICIP 2015.
- Patent*: Redundancy allocation scheme for Reed-Solomon coding in real-time video streaming, 201510170234.5.

Video Bitrate adaptation 2014.3-2014.10
Peking University

- Designed a novel queuing-delay based rate control algorithm, and employed a closed-loop cybernetic model for more stable and agile performance.
- Implemented our algorithm as a new rate control module for Linphone (an C++ open-source VOIP software), which achieved 3dB or more gains in PSNR, and better performance on bandwidth utilization and flow stability.
- Patent*: Video bitrate adaptation algorithm and system, 201510208870.2.

Community365 Android Application 2013.2-2013.8
Peking University

- Worked with some other students to build an Android application for community social networking. This application allows users in the same community to serve each other with functions like sharing used items, sharing information, organizing activities.
- Independently implemented UI of the main logic, including swipe views with tabs, event publishing and displaying with pictures, listviews with search function and so on.
- Responsible for communication with our test users, promote our application, collect feedback and form software requirements.
- Participated in the whole process of the application design and development, including logic, UI design, background interface and implementation.

SKILLS

- Solid knowledge in C++, Java.
- Familiar with Python, Shell, Matlab, HTML, MySQL.
- Solid knowledge in Software Engineering, Algorithms, Data Structures.
- Familiar with computer networks, video streaming.
- Fluent in oral and written English, CET-6 599/710

AWARDS

- Tencent Innovative Scholarship 2014
- Kwang-Hua Scholarship / Outstanding Graduate of Peking University(Top 10% of PKU) 2013
- WuSi Scholarship of Peking University / Founder Scholarship Earlier