

Yangqingwei Shi

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EDUCATION

SEP 2016-DEC. 2017 Carnegie Mellon University, Master of Sincience in Computer Science
SEP 2012-JUN 2016 Peking University, Bachelor of Science in Computer Science, SUMMA CUM LAUDE
OVERALL GPA: 87.4/100 | MAJOR GPA: 88.6/100

SELECTED COURSEWORK

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|-----------|---|---|---|
| ONGOING: | Machine Learning | Graduate Algorithms | Web Application Development |
| UPCOMING: | Computer Vision | Parallel Programming | Multimedia Data Mining |
| FINISHED: | Computer Network Programming Languages | Compiler Design Software Engineering | Computer Architecture Operating System |

SELECTED PROJECTS

- FALL 2016 **Appetit, a competitive dining service web application** (Group Project | Django) [Webpage]
– Implement a competitive dining service pairing platform on which user and restaurants can fully interact and delopy the platform on Digital Ocean.
- SPRING 2015 **UnionPKU, a Platform for PKU Unions** (Group Project | HTML + Android) [Report] [Android Appl]
– Built a platform integrating all campus unions including a website for union administer and an Android application for union members.
- SPRING 2015 **Face Emotion Analysis on Wechat** (Group Project | Python + HTML) [Webpage]
– Combined several face recognition and emotion analysis algorithms to design an interesting app that tells if one's selfie resembles to any of the Emoji.
- SPRING 2015 **Programming Language for Complexity Control** (Group Project | OCaml) [Report]
– Designed and implemented an imperative programming language written for computational complexity control that any well-typed program can be computed in polynomial time.

RESEARCH EXPERIENCE

- MAY 2014-JUL 2016 **Dynamic Mutation Analysis** (Software Testing, Program Analysis | C++) [Conference Paper] [Poster]
Advisor: Dr. Yingfei Xiong Software Engineering Institute, Peking University
– Developed a novel model of mutation analysis that analyzed mutants during the execution of the program and forked the execution only when a mutant led to a new system state;
– Prepared the manuscript and submitted to FASE 2017, pending review;;
- JUL 2015-Nov 2015 **Language Based Architectural Control** (Programming Languages | Java) [Poster]
Advisor: Dr. Jonathan Aldrich Institute of Software Research, Carnegie Mellon University
– Extended a module system based on Wyvern Language to enforce the architectural behavior by integrating these architectural descriptions directly into the language.
- SEP 2014-OCT 2015 **Contextual Dynamic QR Code** (Mobile Computing | HTML+Servlet+Android) [Patent]
Advisor: Dr. Kaigui Bian Institute of Network and Information Systems, Peking University
– Initiated a novel QR code system which accepted inputs from many phone sensors besides the phone camera, and dynamically varied its output according to various contexts where the code is published;

AWARDS

- Nov 2015 3rd Prize of Peking University Young Scientists Symposium (top 10%)
MAY 2014 3rd Prize of 13th ACM Programming Contest in Peking University

SKILLS

- PROGRAMMING: C++, Java, Python, OCaml, Scheme, HTML, Javascript, PHP
TOOLS: Linux, Git, LaTeX, LLVM, ASM Framework, Django, MATLAB, OpenCV, OpenGL