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 | RANK: 5/52

EXPERIENCE

MAY 2017-AUG 2017	**Amazon Inc.**, Software Development Intern at Guided Workflow Platform Team

Project: Storage Model for Card Configurations (Back-end Service, Compiler Design | Java)
— Modified and updated the back-end service of retrieving guided workflow card configutations;
— Designed a new model with a Json-based configuration format to support variable UI presentation according to different request context;
— Implemented an end-to-end authoring process for creating card's UI configuation, including a configuration parser, a deployment script, an HTTP endpoint, a storage-level interface, and a transformation to front-end service.

MAY 2014-JUL 2016 — Peking University, Research Assistant at Software Engineering Institute
Project: Dynamic Mutation Analysis (Software Testing, Program Analysis | C++)
— 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;

JUL 2015-NOV 2015 — Carnegie Mellon University, Research Intern at Institute of Software Research
Project: Language Based Architectural Control (Programming Languages | Java)
— Extended a module system based on Wyvern Language to enforce the architectural behavior by integrating these architectural descriptions directly into the language.

SELECTED COURSE PROJECTS

SPRING 2017 — Facial alignment with multi-stream RNN (Group Project | Python, TensorFlow) [
— Proposed a novel model for facial alignment based on the cascaded regression which adopts RNN to approximate cascaded descent step and CNN to extract robust visual features and optimized the model with inter-dependency across descent steps and domain specific partitioning.

SPRING 2017 — OpenHash, a lock-free concurrent non-blocking resizable hashMap (Group Project | C++)
— Implemented a lock-free concurrent resizable HashMap that truly supports multiple concurrent writers and automatically does non-blocking live data migration on high capacity.

FALL 2016 — Appetit, a competitive dining service web application (Group Project | Django)
— Implement a competitive dining service pairing platform on which user and restaurants can fully interact and delopy the platform on Digital Ocean.

SPRING 2015 — Face Emotion Analysis on Wechat (Group Project | Python + HTML)
— 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.

PUBLICATIONS

JUL 2017	B.Wang, Y.Xiong, **Y.Shi**, L.Zhang, D.Hao. Faster Mutation Analysis via Equivalence Modulo States [ISSTA 2017]
JUN 2017	D.Melicher, **Y.Shi**, A.Potanin, J.Aldrich. A Capability-Based Module System for Authority Control [ECOOP 2017]
JAN 2015	K.Bian, M.Liu, **Y.Shi**, Q.Chen, S.Zhang. Generation and Recognition of Contextual Dynamic QR Code [PATENT]

SKILLS

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