Yonk shi

Software Engineer, Entrepeneur

yonk@hsytech.net

Experience

Software Engineer, Founder at HSY Technology

January 2015 - Present (1 year 11 months)

We are a full service provider building full stack consumer mobile apps. Our specialization in app building are realtime communication, video encoding/decoding, offline-first architecture and rapid prototyping.

FPGA Engineer at Pico Digital

April 2014 - March 2015 (1 year)

Verilog programmer for Xilinx and Altera FPGA chips.

Product Manager Intern at Natural Readers

December 2012 - January 2013 (2 months)

Help redesign a web based speech solution as well as an english learning app.

C# Developer Intern at MadCap Software, Inc.

January 2012 - June 2012 (6 months)

Algorithm Researcher at UC Santa Barbara

June 2011 - September 2011 (4 months)

Designed a shortest path algorithm for a large graph network. 2000 times more efficient than Dijkstra's Algorithm

Programming Intern at Rapattoni Corporation

June 2009 - February 2010 (9 months)

Projects

LivePoke

July 2015 to Present

Members:Yonk shi

We seized an opportunity to develop an utility app for Pokemon Go. We went through a hackaton style development session lasting 100 hours and LivePoke was born. It was one of the first utility app to reach market at the height of Pokemon Go hype. We reached 150,000 users within the first week and was turning $2000/day in revenue at its peak.

Polyfish

May 2015 to Present

Members:Yonk shi

Polyfish is a mobile app that takes on a radically new approach to learn a language: Talking.

We secured funding from a private investor. Following the successful fund raising campaign, we formed and lead a team of ten to develop and market Polyfish. I was the main architect behind the project. There were numerous technical innovations we had achieved:

1. Real time video communication, videos were transmitted near instantaneously globally. We have built our own protocol based on WebSocket.
2. By-passing GreatFireWall of China. I have designed an extensive caching network to by pass the Chinese firewall. We were able to deliver the product to users in world's biggest English learning market.
3. Effective learning model: Our learning model is intuitive and effective. For users with no background in a foreign language, we can assist them in understanding and talking, slowly building up their proficiency. We gradually guide user into open ended verbal discussion, achieve fluency.

FootTrail

April 2015 to Present

Members:Yonk shi

FootTrail is a project solely developed by myself. It uses Python back end and Angularjs front end. It is a photo organizer and Facebook sharing utility designed for travelers. Travelers can automatically connect their google drive photos and upload one picture per day to their Facebook. FootTrail enables users to receive much higher engagement rate on their uploaded content by scheduling and trickling out the uploads.

Applied Aritificial Intelligence Project

January 2013 to Present

Members:Yonk shi

In this project, we built a PID system controlling a robotic arm. The code was written in Java running on ROS and simulated in VREP.

Cryptography Project

June 2013 to Present

Members:Yonk shi

Implemented modern cryptographic algorithms including: RSA, shift register sequences, factoring large numbers and correlation attacks.

Concurrent And Real Time Programming Project

February 2013 to Present

Members:Yonk shi

Designed an embedded real time monitoring server/client. It was written in Java using LJRealTime framework. Concurrency, scheduling, multi-threading, semaphores were used in the project.

Computer Architecture Project (CSE 141/L)

June 2012 to December 2012

Members:Yonk shi

Built a 17-bit(as per requirement) and fully pipelined RISC processor. Custom 17-bit ISA based on MIPS. Innovative asymmetric design allowed the project to achieve the fastest (clock speed) design in the class.

Compiler Construction
September 2012 to Present
Members:Yonk shi

Built an x86 compiler using JavaCC. Abstract syntax tree, semantic analysis, type checking, function overloading, i-code generation, and basic optimization.

Advanced Digital Design Project (ECE111)
March 2012 to Present
Members:Yonk shi

Built a SHA-1 encryption processor using Verilog2001 with emphasis on pipelining. The project achieved the lowest area*delay value in the class.

CSE148 Advanced Processor Architecture Design (Spring 2014)
Members:Yonk shi

Will build and optimize a fully functional MIPS processor and load it onto FPGA boards. Course begins on the Spring quarter of 2014 (end of March)

CSE145 Embedded Systems Design(Spring 2014)
Members:Yonk shi

Will lead a team of five to design a controller board and antenna array for a Quadcopter that can track radio beacon. Project will contain arduino, custom antenna design and some robotic algorithms. Course begins on the Spring quarter of 2014 (end of March)

Skills & Expertise

Python
Mobile Application Development
Java
C++
C#
Verilog
Linux
FPGA prototyping
Embedded Systems
Computer Architecture
x86 Assembly
MIPS
Concurrent Programming
Realtime Programming
Artificial Intelligence
SPARQL
Logistic Regression
Machine Learning
Scrum
Semantic Web
ModelSim

Altera Quartus
Agile Methodologies
Microsoft SQL Server
Google App Engine
Matlab
ASP.NET MVC
Eclipse
Parallel Algorithms
Illustrator
VLSI
XML
Software Engineering
Swift

Languages

English	(Native or bilingual proficiency)
Chinese	(Native or bilingual proficiency)
Swedish	(Elementary proficiency)
French	(Elementary proficiency)

Education

University of California, San Diego
Bachelor of Science (BSc), Computer Engineering, 2011 - 2014

Lunds universitet / Lund University
Computer Science, 2012 - 2013

Moorpark College
Electrical Engineering & Computer Science, 2008 - 2011

Point Grey Secondary
Diploma, 2003 - 2008

Summary

http://stackoverflow.com/users/830469/yonk

Interests

Skiing, Travelling, Backpacking, Camping, Skydiving, Dancing and Cooking

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Contact Yonk on LinkedIn