Jiho Choi

choi296@purdue.edu

1.765.430.5585
www.jihochoi.info
https://github.com/jihochoi

OBJECTIVE

To be admitted to computer science graduate program with research opportunities in the areas of distributed systems or software verification.

EDUCATION

Purdue University - West Lafayette, IN   Dec. 2017 (Expected)
B.S. in Computer Science   Major GPA: 3.28 / 4.00   Cumulative GPA: 3.17 / 4.00

- **Systems Programming:** Compilers, Operating Systems, Computer Networks, Database Systems, Cloud Computing Security
- **Computational Science & Engineering:** Numerical Methods, Differential Equation, Analysis of Algorithms
- **Software Engineering:** Software Engineering, Software Testing, Computer Security, Competitive Programming

RESEARCH / RELATIVE EXPERIENCE

Software Engineering Intern   Fasoo Inc, Seoul, South Korea   May. 2017 - Aug. 2017

- Developed 11 Swift AST Node checkers for Sparrow Static Analyzer in **Java / Maven**.
- Participated in scaffolding 2250 Windows API Functions for Sparrow Static Analyzer for C++ Libraries.
- Developed MSDN Web Crawler for scaffolding.   (Supervisor: Principal Research Engineer Youngbum Jung)

Individual Research   Purdue Univ. West Lafayette, IN   Jun. 2016 - Dec. 2016

- Implemented an Apache Storm Benchmark using nodes of AWS EC2 to evaluate the performance of the streaming data in cloud computing environment in **Java / Clojure**.
- Expanding Yahoo Streaming Benchmark to test encrypted streaming data operations' performance using Apache Storm and Kafka framework.   (Supervisor: Prof. Patrick Eugster)

Undergraduate Teaching Assistant   Purdue Univ. West Lafayette, IN   Aug. 2016 - Current

- Teaching and helping the undergraduate students in Computer Architecture (CS250) lab sessions.
- Focused materials are logic gates, **circuit design**, and **ARM assembly** language.(Supervisor: Prof. George Adams)

Full Stack Web Developer   Purdue KUSA, West Lafayette, IN   Oct. 2016 - Jan. 2017

- Developed the static webpage for Purdue University's *Korean Undergraduate Student Association* using **JavaScript, HTML5/CSS3,** and Bootstrap framework.

SOFTWARE DEVELOPMENT PROJECTS (GITHUB)

Remote File Sharing System   Jan. 2017 - May. 2017

- Implemented uTorrent like P2P file exchanging program using **socket API** and **multi-threading** in **C**.

Coconut Water (http://coconutwatr.herokuapp.com)   Jan. 2017 - May. 2017

- MEAN Stack (**MongoDB**, **Express**, Angular, **Node.js**) web application to connect students in same courses with posts and real-time chatroom. **Google Auth**, **socket.io**   (Software Testing, Supervisor: Prof. Suresh Jagannathan)

XINU Operating System Modification   Jan. 2016 - Current

- Implementing additional features like round-robin semaphore and optimizing process scheduler in **XINU OS**. (CS354 Operating Systems, Supervisor: Prof. Payer)

Sentinel Data Vault   Aug. 2015 - Dec. 2015

- Developing GUI Database managing program with Java, SQLite (DBMS), and Java Crypto API.
- (* This Java application helps users to store and transfer important information efficiently and securely.)

Perfect Note IBM Bluemix   Oct. 2015 - Dec. 2015

- Developing interactive web application with AngularJS, Bootstrap using **IBM Bluemix** Server and Database.

My Own Shell (Lexer / Parser)   Jan. 2015 - May. 2015

- Implemented Bash like shell using Lax/Yacc and C++ which has wildcard processing, subshell, and extra features.

HTTP Server   Sep. 2015 - Nov. 2015

- Developing Linux TCP / HTTP server program with C++ Socket API.

iOS Purdue App (App Store)   Jul. 2014 - Sep. 2014

- Participating in developing Purdue iOS App with Purdue iOS Development Club.

SKILLS

- Programming Language **: C**, **Java**, Bash, Scala, HTML5/CSS3, **JavaScript**, **C++**, **SQL**, Lex/Yacc, Clojure, and Swift
- IDE / Software **: IntelliJ**, Visual Studio, **Terminal**, Vim, Excel, MATLAB, XCode, Publisher
- Tool / Framework **: Git**, Maven, LaTex, Apache Strom, Hadoop, **MEAN Stack (Node.js)**, and Bootstrap

LEADERSHIP / ACTIVITIES

- Purdue Korean Undergraduate Student Association – **President**   Jul. 2015 - May 2016
  o Lead Purdue KUSA officers and members, and hosted / directed 4 large scale events.
  o Obtained 3 grants with an amount of $10,300 from Purdue SOGA, Purdue SAO.