# ZHIHAO (JOSEPH) CAO

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#### **OBJECTIVE**

Enriched skills in Java programming and Database development. Profound knowledge in Internet and Security. Seeking a full-time/intern position in Software/Web-Application/Database Development.

#### **EDUCATION**

## Purdue University - Indianapolis, IN

Master of Science in Computer Science, GPA: 3.5/4.00 Aug. 2015 – May 2017 Aug. 2011 - May 2015 Bachelor of Science in Computer Science, GPA: 3.5/4.00

### **SKILLS**

**Programming Language**: Java, C /C++, Python

Web Development: PHP, JavaScript, HTML5, CSS, ActionScript

Database: SSMS, Oracle, MySQL, SQLite

Technologies: Node.js, D3, JAVA RMI, MVC, AJAX

#### **WORK EXPERIENCE**

## Center for Computational Biology & Bioinformatics - IUPUI

Indianapolis, IN Jan. 2015 – May 2016 Database developer

- Collected, cleaned, and formatted complex/raw data to fit into database
- Designed database scheme (3NF/BCNF)
- Developed the database using MySQL

#### Office for Liberal Arts department of IUPUI

Office Assistant

Digitalized paper document, classified document, and stored into database.

# **ACADEMIC PROJECTS**

Online Marketplace, IUPUI Prof. Ryan Rybarczyk

Jan. 2017 – May 2017

Indianapolis, IN Jan. 2012 - May 2013

- An online B2C shopping platform (highly reliable distributed system) written in Java
- Applied Agile-style development approach (cooperated with GitHub)
- Applied software design patterns to support reusability, expansibility, availability, and maintainability

### Online Chess Game – Gomoku, IUPUI Prof. Yao Liang

Aug. 2016 – Dec. 2016

- An online Player versus Player chess game written in JavaScript (Client-Server Architecture)
- Real-time network connection is achieved by applying Socket.IO and Node.js

# In-Flight Entertainment Database System, IUPUI Prof. John Gersting

Jan. 2016 – May 2016

- Developed a BCNF database system using Microsoft SQL Server (SSMS)
- Designed SOL functions to serve multiple use-cases of the Entertainment System

# Online Shopping System, IUPUI Dr. Ruchika Malhotra

Jan. 2016 – May 2016

- An online C2C shopping platform written in PHP, Javascript, and HTML
- Object-Oriented Analysis and Design (IEEE STD 830-1998 SRS)

## Wireless Sensor Network Code Disseminator, IUPUI Prof. Yao Liang

Aug. 2015 – Dec. 2015

- Developed a front-end for a code disseminator (PhD. students' research project) in a wireless sensor network
- Developed a database (SQLite) and hook up to the back-end
- Allowed the sensors information and statuses be maintained efficiently by cooperating the user-friendly front-end (written in Java) and dedicated database

### Internet Data Transfer Protocol, IUPUI Prof. Yao Liang

Aug. 2014 – Dec. 2014

- Developed a reliable UDP protocol using Python
- Designed a Sliding Window model (Go-Back-N mechanism) to transit packets reliably