Bingpeng Xiang

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EDUCATION

- **New York University** — Brooklyn, NY
  Master in Computer Science; GPA: 3.78 — *Sep. 2018 – May. 2020*
  TA for CS6083 Principles of Database Systems — *Feb. 2019 – Present*

- **Tianjin University of Technology** — Tianjin, China
  Bachelor of Science in Information and Computing Science; GPA: 3.80 — *Sep. 2014 – Jul. 2018*

EXPERIENCE

- **Tencent** — Shenzhen, China
  Software Engineer Intern, Continuous Integration(CI) Team — *Jun. 2019 – Aug. 2019*
  - Optimized the run-time environment of the CI runner to support custom language, container, and OS.
  - Implemented multiple plugins to integrate other internal platforms including git platform, deployment platforms, Windows and iOS software sign service, and Android and iOS close alpha service.
  - Collaborated with Tencent Cloud Virtual Machine Team to develop CI workflows which shorten the release cycle time from 5 hours to 1 hour. Also developed a release workflow for Tencent Video software.

- **Yuantek** — Beijing, China
  Software Engineer Intern, Traffic Analysis Team — *Apr. 2018 – Jun. 2018*
  - Implemented a declarative packet manipulation library using metaclasses in Python, which will be able to encode/decode whole company-wide Type-Length-Value(TLV) format communication protocols.
  - Designed a Telnet command interface to provide a run-time monitor with features of command completion, command history, and subcommand.
  - Refactored the legacy IP extraction program in Python to support run-time monitor, crash recovery, and also resulted in a 30% reduction in the rate of the program crash.
  - Launched a 24/7 service to extract URLs matching the specific pattern from email and transferred them to the partner companies that had over 99.9% reliability.

- **Tianjin University of Technology** — Tianjin, China
  Research Assistant, Data Management Software for Smart Agriculture — *Dec. 2017 – May. 2018*
  - Designed fully managed service with two researchers, which is capable to connect, manage, and ingest data from agriculture sensors.
  - Built RESTful APIs using the Flask framework in Python which provides authentication, filter, CRUD endpoints.
  - Developed a desktop app using Qt framework in C++ which enables users to analyze, visualize IoT data in real time, and configures custom alerts and triggers to monitor any environmental change.
  - Promoted the extensibility and control granularity of the sensor by integrating a special description file.

PROJECT

- **Oingo**
  - Designed a note share website using the Laravel framework in PHP. The users are able to publish notes linking to certain locations, date-time or tag. Their friends could receive notes based on their custom filters. The website also supports comments, friend management, and note search.
  - Increased query efficiency by using Geohash to store location and designing a special scheme to store repeated event information.
  - Visualized the note in the map to enhance the user experience by introducing Google Map API.

- **AIS Message Parser**: A Python library to encode/decode AIS message, the parse core is written in C to acceleration.

- **Web Search Engine**: Search engine indexed over 4 million pages whose retrieval time was less than 0.5s per query.

- **TV Show Tracker**: The serverless application that could track what you're watching and find where to watch.

PROGRAMMING SKILLS

- **Languages**: Python, Java, C++, PHP, SQL, JavaScript, HTML

- **Technologies**: Git, Vue.js, React, Vim, Bash, Regex, Docker, Markdown, MySQL, AWS