

BAILE (PETER) CHEN

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Education

University of Pennsylvania, Philadelphia, US

Sep 2018-Present

- Pursuing a BSE Degree in Networked & Social Systems Engineering
 - Programming Languages: Javascript, Python, Java, Shell Script, jQuery
 - Relevant Coursework: Discrete Math, Data Structures & Algorithms, Scalable and Cloud Computing
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Awards

Winner, Hult Prize@Penn 2019

Dec 2018

- Background: an annual, year-long competition that crowd-sources ideas from MBA and college students after challenging them to solve a pressing social issue
- Led a team of four and pitched the idea of a mobile application that can effectively match students with mentors in order to cut youth unemployment

Winner, Penn Wharton Innovation Fund Implementation Award

Nov 2018

- Background: an award that funds creative and meaningfully innovative ventures from the Penn student community
 - Worked with an alumni and a graduate school student on the venture *AppTrackAsia* which is dedicated to provide a one-stop portal for colleges so as to streamline the application process for Asian students
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Research Experience

Research Assistant, Distributed Systems Lab, University of Pennsylvania

Jun 2019-Present

- This research aims to build a microservice platform where every developer around the world can contribute to. Upon clients' requests, the platform can connect multiple microservices together to perform an atomic transaction. Client is charged per request and a portion of this amount is received by the developer of the corresponding microservice
 - Worked under the guidance of Professor Sebastian Angel and Vincent Liu to construct the underlying infrastructure of the microservice platform that enables fault tolerance of transactions and serializability of concurrent client requests
 - Implemented the above infrastructure to simulate commercial products such as Uber
 - Technologies: AWS Lambda, AWS DynamoDB, AWS Step Functions, AWS API Gateway, Uber H3, Python
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Extra-Curricular Activities

Teaching Assistant, CIS 197: Javascript, University of Pennsylvania

Sep 2019-Present

- Work on course webpage maintenance and assignment grading
- Answer students' questions through office hours and online discussions website

Full-Stack Web Developer, Penn Labs, University of Pennsylvania

Feb 2019-Present

- Designed and developed *Penn Basics*: a website built upon university infrastructure and APIs that provides students with the abilities to browse dining options, check open laundry machines, and book study spaces
 - Frontend Technologies: React.js, Redux, Service Worker, IndexedDB
 - Backend Technologies: Node.js, Express, MongoDB, WebPush
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Work Experiences

Masterson Technology Limited, Hong Kong

Dec 2018

- Developed the online application portal for a college admission office
- Designed the new database structure used by the online portal and performed data migration from previous databases to the redesigned ones
- Technologies: React.js, Apollo Server, Express, Node.js, GraphQL, MongoDB, Docker, Git

Perfect World (Beijing) Games Co., Ltd, China

Aug 2018

- Participated in the development and testing of a massively multiplayer online game
- Technologies: Unity3D, Lua, Java, MySQL