

# PERRY YANG

☎ (831) 346-8325 • ✉ byang33@ucsc.edu • 🌐 strslbyn99 • 🌐 Perry Yang

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## EDUCATION

**University of California, Santa Cruz** • Santa Cruz, CA **Sep 2017 – present**  
**Computer Science B.S.** Expected Jun 2020  
Dean's Honer for being top 10% of undergrad  
GPA: 3.9/4.0

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## TECHNICAL SKILLS

- Programming: C++, Python, Java, C, Haskell, Prolog, Scala, JavaScript, HTML5/CSS3, LaTeX, SQL, Markdown
- Technology: Flask, MongoDB, Redis, Unix, Git, React, Docker, Vim, Microsoft Visual Studio
- Languages: Cantonese, Mandarin

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## RELEVANT COURSEWORK

Data Structure & Algorithm • Computer Architecture & Assembly Language • Advanced Programming(C++)  
• Comparative Programming Language • Distributed System • Computer Networking • Software Engineering

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## WORK EXPERIENCE

**Grader** University of California, Santa Cruz **Jul 2019 – present**  
Santa Cruz, CA

- Grade programming assignments for 200 students across two upper division CS classes

**Back-end Developer Intern** ColorfulClouds Tech. **Summer 2019**  
Beijing, China

- Developed a new custom-dictionary feature for LingoCloud Interpreter app for approximately 10,000 users to add customized words
- Built the custom-dictionary using Flask for web development and MongoDB for data management
- Utilized Redis database to cache customized translation result, reducing the response time by 80% less than the time taken without cache
- Implemented a CMS for backstage management organizing data in MongoDB with an open-source framework AMIS by Baidu Company in two weeks

**C++ Programmer Intern** Seekway Technology **Summer 2018**  
Guangdong, China

- Implemented 3D animation display on a LED cube display equipment with C++ and Microsoft Visual Studio
- Accomplished a LED light show project, which was exhibited by SK-II in the 50th China International Beauty Expo in Guangzhou in Sep 2018

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## PROJECTS

### E-Sport Stat Tracker (Python, React)

- Implemented API calls retrieving data from databases using Flask, and maintained data within MongoDB
- Built a user-friendly UI using React within a team of five and overall delivered a web application to statistically visualize professional players' performance in League of Legends in six weeks

### Fault-Tolerant Key-Value Store (Python)

- Implemented RESTful web services accepting API calls from Docker platform
- Developed an overall distributed key-value store with strong consistency that can store more data than can fit into one single machine, using consistent hashing

### Tiny Language Interpreter (Haskell, Python, Scala)

- Wrote three versions of language interpreter in Haskell, Python, and Scala respectively for a tiny programming language, which contains four types of statements: *let variableName = expression*, *if expression goto label*, *print expression(s)*, *input variableName*

### Arbitrary Precision Calculator (C++)

- Performed arbitrary precision integer arithmetic in the style of dc, which can calculate Big Num with more than just 64-bits of precision limited in ALU hardware