Daniel K. Rui danrui@uw.edu **206-960-9030**
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I am highly organized, punctual, and reliable, able to work as a team member or independently with excellent written and verbal communication skills, and I am looking to embrace a challenging CS career.

Education

Bachelor of Science in Computer Science & Engineering 09/2018 - 06/2022
University of Washington, Seattle, WA GPA: 3.85

Notable Projects

- Sentence generator using BNF grammar (Java)
- Twenty-Questions game (Java)
- File compression using Huffman encoding (Java)
- Interpreter for a made-up programming language (Racket)
- Flights database & booking service using real-world data (Java Spark & SQL)
- Matrix transposition optimization using benefits of caching (C)
- Implementation of malloc and free using explicit free list (C)

Work Experience

Student Assistant**,** *School of Pharmacy, University of Washington, Seattle, WA* *Jan 2019 -Current*
My responsibilities included database management, mail-merge, project tracking, filing, paperwork, making worksheets, and organizing documents about students.

Software/Firmware Developer**,** *Peak to Peak Robotics, Lafayette, CO* *Sep 2017 - Mar 2018*
I worked as part of a team to design and create a robot that would perform a set of tasks for the FTC competition. My role was to write the driver in Java for the motors of the robot, the phones to transmit the commands, and the controllers, as well as to create a simulated environment to train my teammates on how to use the controllers more effectively.

Teaching Assistant (TA)**,** *Peak to Peak Charter School, Lafayette, CO* *Aug 2018 - Sep 2018*
I taught and tutored students seeking math help, usually ranging from algebra to calculus. I helped the teacher plan lessons, create presentation slides, and write up worksheets and activities by leveraging the available tools in Google Docs, Microsoft, as well as premium teaching websites and databases. By assisting my teachers and leading groups of over-achieving students, I learned about life as a teacher, how to handle important and confidential information, as well as how to teach more effectively.

Instructor**,** *Kumon, Boulder, CO* *Sep 2016 - Sep 2018*
I worked with students individually to develop their math and reading skills, using regular classroom tools as well as the worksheets provided by Kumon.

Technical Skills

- Programming Languages: Java (intermediate), C (beginner), SML, Racket, Ruby, Assembly
- Web Technology: HTML, CSS, PHP, JavaScript (basic)
- Database: MongoDB, MySQL, SQL Server, JSON, Datalog, SQL++, Spark
- Operating Systems: Linux, Microsoft Windows, Mac OS
- Tools: Eclipse, GitHub, Azure, AWS, Matlab

Organizations / Extracurriculars

Recipient**,** *Mary Gates Scholarship, University of Washington, Seattle, WA* *Sep 2018*
I was admitted to the University of Washington at age 14, and additionally was selected as a recipient of the Mary Gates Scholarship from the Halbert and Nancy Robinson Center for Young Scholars because the UW Academy Scholarship Committee was impressed with my outstanding academic achievements and extensive record of community involvement.

Recipient, *Annual Dean's List high-scholarship award****,*** *UW, Seattle, WA* *Sep 2018 - Sep 2019*

Founder and President**,** *Peak to Peak Math Club, Lafayette, CO* *Oct 2016 - Sep 2018*
I planned lessons and taught hour-long weekly meetings where students would discuss math problems with each other. I coordinated with teachers and other advisors to organize activities in person and via email. I also brought my club to competitions and other events geared toward high-achieving highschool math students.