

# COLIN MONAGHAN

Puyallup, WA • (253) 380-6029 • colinmonaghan@pugetsound.edu •  
<https://www.linkedin.com/in/colinlmonaghan/>

## EDUCATION

---

**Bachelor of Science in Computer Science & Mathematics**, May 2022

**University of Puget Sound**– Tacoma, WA

- Earned 3.85/4.0 Cumulative GPA
- Coursework: Algorithms and Data Structures, Operating Systems, Programming Language Paradigms, Computer Graphics, Linear Algebra, Number Theory, Partial Differential Equations

## SKILLS

---

- Languages: Java, C, Python, Haskell, Prolog, Scheme
- Software: Eclipse, MARS, GitHub, VisualVM, Excel, R & RStudio
- Operating Systems: Ubuntu, Windows, Mac OS

## ACADEMIC PROJECTS

---

- Implemented key components in C in a real OS kernel, including a ready queue, a robust CPU scheduler, synchronization mechanisms, and deadlock detection & recovery
- Designed and implemented concurrent programs in C using proper synchronization techniques
- Implemented advanced data structures, advanced searching, dictionary algorithms and graph algorithms in Java

## RELEVANT PROFESSIONAL EXPERIENCE

---

**Undergraduate Research Scholar**, 05/2020-08/2020, **University of Puget Sound Computer Science & Math Department** – Tacoma, WA

- Collaborated with 2 professors and a fellow student to implement replacement policies into a pre-existing Java codebase, then analyzed the efficiency of the policies
- Diagnosed ambiguous problems & bugs and problem solved potential solutions
- Presented research in thorough formal presentation to 100 math and science researchers and respective faculty advisors in program

**Computer Science Subject Tutor**, 01/2020 to Current, **University of Puget Sound Computer Science & Math Department** – Tacoma, WA

- Helped students with a variety of learning and communication styles with concepts and reasoning in introductory and intermediate computer science courses

**Verification Team Member**, 05/2018 to 12/2019, **Wild Waves Theme Park** – Federal Way, WA

- Maintained the park vault and ensured the daily balance was accurate
- Responsible for handling and counting employee cash throughout the day

## LEADERSHIP & ACTIVITIES

---

**Cross Country and Track & Field Student-Athlete**, 09/2018 to Current, **UPS** – Tacoma, WA

- Facilitated communication between fellow athletes and coaches as a team captain
- 2020 Indoor All-American, 2019 Cross Country All-Academic, 3-time National Qualifier, 3 Northwest Conference Titles, 2018 Harry Herbisky Award for Scholarship, Skill and Determination