# Tyler Bontrager

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Aug. 2019 - May 2023

GPA: 3.25

# **Education**

Willamette University, Salem, OR

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Bachelor of Science: Computer Science, Data Science

**Relevant Coursework** 

Computer Science: Programming with Python, Data Structures, Algorithm Analysis, Networks and Systems, Ethics, Topics in Cybersecurity, Symbolic Logic, Advanced Math. Data Science: Data Science with R, Inferential Statistics, Data Management with SQL, Machine Learning, Ethics, Math for Data Science

#### **Student Achievements**

- Managed academic workload effectively and balanced multiple projects and assignments to incorporate valuable extracurricular experiences into a dense weekly schedule.
- Ensured timely submission of high-quality coursework by prioritizing tasks by complexity and deadline.
- Analyzed rigorous academic texts to synthesize information and produce insightful written works and presentations.
- Applied lecture lessons to produce deliverable projects to demonstrate understanding of material.
- Founded and presided over a first-of-its-kind chess club to invite new players to enjoy the game in a challenging, yet welcoming judgement-free space.
- Served as treasurer for the unique Japanese culture club to manage funds to coordinate popular annual events.
- Volunteered for a local middle school outreach program to teach students about the Japanese language and culture.
- Scheduled and attended meetings with peers to work on team projects; met with faculty to report progress and solicit feedback.

## **Professional Experience**

## **Bon Appetit Management Company**

Caterina Attendant

Salem, OR

Nov 2023 - PRESENT

- Effectively and completely cater for up to 7 events a day sometimes with only one teammate and in rare cases alone.
- Ensure accuracy in formal event setups including table arrangements and guest dietary preferences.
- Prepare and transport equipment to swiftly set up food and drink for catered events for Willamette community.
- Prioritize and delegate tasks stage-by-stage for effective and efficient completion of contracts to satisfaction.
- Adapt to last-minute changes and overcome unexpected challenges with creative and effective solutions.
- Balance time for catering schedules to prioritize urgent and high-effort contracts while still fulfilling smaller ones.
- Serve catered bars with skillful knowledge of available wines, beers, and ciders.
- Ensure catering equipment is readily available and clean for the next contract.
- Interfaced with internal and external departments to carry out event preparations smoothly.

## **Sylvan Learning Center of Salem**

Senior Tutor

Salem, OR

May 2022 - PRESENT

- Deliver effective personalized tutoring of standard K-12 subject content fulfilling students' unique needs.
- Consistently receive positive feedback from clients and students as student grades rise by 20% on average.
- Patient and available to work with students with special needs boosting their skills and productivity significantly.
- Maintain detailed records of student progress, assignments, and feedback for continuous improvement.
- Effectively balance time and attention between several students during each session.
- Undertook a sub-program in Mill City to tutor a small group of 6 students during the summer.
- Deliver personalized one-on-one sessions to develop understanding of advanced mathematical concepts.
- Operate Study Hall program to assist 3 5 students at a time with completing homework and catching up.
- Respond promptly to inquiries from clients to provide clear and helpful information relevant to student progression.
- Implement individualized strategies to improve student comprehension and academic performance in each subject.
- Upheld Sylvan standards to pass every QA performance test with excellence.



#### Willamette University

US 2020 Census Twitter Data Research Assistant

Salem, OR

Jan 2023 - Jun 2023

- Encoded 8450 rows of data to set a ground truth for an NLP classification training model.
- Drafted a log to justify decisions to enforce consistency and facilitate collaboration.
- Recorded notes of information from dataset to preserve thoughts and insights used for final deliverable.
- Created R scripts to reduce repetition of data in columns of interest to expedite the encoding process.

## Willamette University

Salem, OR

Computer Science Department Tutor

*Mar 2021 - May 2022* 

- Helped dozens of students better conceptualize CS-related topics to improve confidence in class and on homework.
- Utilized detailed diagrams and performed demos to aid understanding of advanced mathematical concepts.
- Determined critical points of conceptual misunderstandings through effective knowledge questioning.
- Walked through standard debugging process with students to uncover faults in logic or code syntax.
- Documented commonly discussed topics and effective remedial teaching tactics to share with course faculty.
- Occasionally solved hardware malfunctions through effective troubleshooting and use of software diagnostic tools.
- Dedicated off-time to self-learn concepts in machine learning, networking, and programming practices.
- Successfully incorporated walk-in student visits into schedule, especially during busy times like midterms and finals.

## Willamette University

Salem, OR

Graph Convolutional Neural Networks Research Student

Jun 2021 - Sep 2021

- Surveyed literature to learn applications of GCN networks for the social influence maximization problem.
- Adeptly processed dense theory to quickly acquire familiarity with a new concept.
- Collaborated with professor and research partner through regular meetings to report recently broadened understanding of assigned readings.
- Presented findings via slideshow and poster at school symposium and at the Consortium for Computing Sciences in Colleges (CCSC) conference.

## Willamette University

Salem, OR

Colloquium Associate (Peer Mentor)

Fall 2021 - Fall 2022

- Facilitated weekly workshops pertaining to crucial aspects of college life to offer students a smoother transition.
- Held regular office hours 3 times per week to serve as a resource for 12 first-year students in the colloquium cohort.
- Utilized software to design regular check-in surveys to gauge the needs of students and make tailored adaptations.
- Sent weekly emails to communicate critical information to students as well as supplemental information as needed.
- Supported students writing essays to gain high marks upon their final submission to the professor.
- Served in a senior capacity as a returning peer mentor for the Fall 2022 semester to assist leading faculty in future decisions and serve as a resource for new staff.

## Willamette University

Salem, OR

Resident Advisor

Jan 2022 – May 2022

- Supported residential community development by planning fun event programs tailored to hall interests.
- Curated engaging material for the hall's bulletin board to promote activities and programs for residents.
- Interacted with residents in one-to-one conversations to establish meaningful connections.
- Responded to interpersonal concerns impartially; accurately, fairly, and fully documented incidents when necessary.
- Upheld federal and school-wide policies to maintain confidentiality and promote a safe living environment.

#### **Residence Hall Association**

Salem, OR

Senior General Assembly

Sep 2021 – May 2023

- Committed about 90 hours in weekly meetings to discuss over 100 requests to support residents and programming.
- Maintained perfect attendance for meetings during the 2022-2023 academic year.
- Participated in committee meetings to facilitate efficient planning for the organization's hosted school-wide events.

## Willamette University

Senior Student Service Staff

Salem, OR

Mar 2021 - May 2023

- Provided high-quality meals to 300 400 students per shift in a sanitary work environment.
- Supported occasional yet popular events throughout the school year seeing between 800–1200 patrons of all kinds.
- Floated between stations to accommodate busier lines and maintain low queue wait times.
- Oversaw training of newer staff members, helped coordinate understaffed shifts, and ensured a clean servery.
- Used clear kitchen communication to foster a safe and clean work environment by preventing injury and loss of product.
- Occasionally helped professional catering team for various contracts as needed.

## South Commercial Dairy Queen

Salem, OR

Senior Crew Member

Sep 2018 - Feb 2020

- Communicated effectively to understand orders and worked quickly to make quality products in under 3 minutes.
- Delivered exceptional customer service by addressing customer inquiries, resolving complaints, and maintaining a
  positive dining experience.
- Assisted customers with menu selections by providing recommendations based on their preferences.
- Coordinated with team members through effective communication and workflows to maintain speedy service.
- Carefully monitored inventory while restocking supplies to ensure capacity for continuous service.
- Promoted and upsold featured menu items, seasonal specials, and limited-edition exclusives.
- Worked around bottlenecks and performance hindrances to maintain customer satisfaction.
- Led team members by demonstrating high-performance processes and high-value behaviors.
- Delegated tasks to accommodate busier departments and standing in for team members in need of breaks.
- Promoted a positive atmosphere by expressing enthusiastic energy, confidence, and a fun, optimistic attitude.
- Ensured a perpetually clean work environment to boost aesthetic neatness and order.

#### **Extra Experience**

## **Council on International Education Exchange**

Tokyo, Japan

Tokyo Study Abroad Student

Jul 2023 – Aug

- Attended a 6-week program to study Japanese art history and analyze Japanese popular culture.
- Wrote two analytical papers totaling 2,635 words:
  - Analyzed the extent to which localization affects the popularity of visual novel games.
  - Reflected critically on the influence that political power has on art in the Edo period based on art from Toshouguu shrine in Nikko, Japan.
- Utilized circumlocution techniques to effectively communicate more complicated ideas in simpler ways.
- Collaborated with other students to present about Japanese Ningyou (doll) art across different periods.
- Wrote daily in a journal to record important or noteworthy events for later compilation projects.

#### Skills

Hard: conflict resolution, customer service, multilingual, Oregon liquor laws, shift leadership, tech savvy.

**Soft:** adaptive, analytical, collaborative, communicative, competent, creative, critical thinking, dedicated, independent, time management.

**Technical:** Bash, C, C++, Computer Networking, Computer Vision, Data Analysis and Visualization, Git, HTML/CSS, Java, Java, JavaScript, MATLAB, MySQL, NumPy, NLP, Pandas, PostgreSQL, PowerShell, Python, Quality Assurance, R, Software Testing, SQL, Web Development.

Languages: English, Spanish, Japanese.

#### Honors

**Awards:** NSF S-STEM Scholarship (2019–2023), Dean Merit Scholarship (2019–2023), College Honors (Fall 2020) **Certifications:** OLCC (2023), EFC Food Handler (2021), ODE Seal of Biliteracy (2019), AHA First Aid (2016)

## **Projects**

# **Personal Website**

Developer Jan 2023 – PRESENT

- Created from-the-ground personal website to document profile of personal achievements and skill development.
- Continuously applying knowledge of HTML/CSS and Javascript to enhance website features.
- Maintained a record of changes by following intentional system documentation to ensure organization.

# **Campus Swearing Culture Survey**

Collaborator Mar 2023 – May 2023

- Surveyed 25% of the student body at random to respond to demographics and campus swearing culture questions.
- Aggregated responses into tidy processed tables to produce dozens of insightful visualizations.
- Ran hypothesis tests to clarify validity of conclusions drawn from the data while staying aware of assumptions.
- Presented findings to broad audience using inclusive vocabulary without sacrificing accuracy or clarity.

## X (Form. Twitter) Data Research

Contributor Jan 2023 – Jul 2023

- Met regularly with project leader to discuss updates and present findings from data sample.
- Encoded 8450 rows of data to set ground truth for an NLP classification model.
- Used sentiment analysis to investigate perspectives on US 2020 Census citizenship question on X (form. Twitter).
- Created scripts to eliminate redundancies and expedite the encoding process.

#### **Datafest**

Participant Fall 2022, Fall 2023

- Contributed valuable insights to two weekend data wrangling and analysis events using large, raw datasets.
- Practiced common techniques used for exploratory data analysis, visualization, stat testing, and communication.

## **Atomic Chess Games Analysis**

Lead developer Jan 2021 – Mar 2021

- Processed thousands of games in raw dataset to facilitate analysis by developing regression models.
- Used machine learning techniques to derive novel insights about games of Atomic Chess.

#### **Dandyhacks**

Co-developer Nov 2020

- Developed on Unity engine to create original draft of a working multiplayer game.
- Learned concepts in networking to successfully incorporate simultaneous play from separate devices.

#### **2048 Games**

Developer Apr 2017, May 2019

- Developed two functional versions of the game 2048: one project developed graphically using Java, the other console-based version developed in Python.
- Refined code to use more efficient algorithms to boost runtime performance.