

Drew King

Seattle, WA ✉ drew.p.king@pm.me ☎ 206-747-5111 📄 [/in/kingdrewsea](https://in/kingdrewsea) 🌐 drewking.dev

SUMMARY

Data analyst and UX-focused engineer with experience in accessible web development, interactive data visualizations, and stakeholder-driven design. Published researcher and mentor skilled in R, Python, and JavaScript, with strengths in communication, analysis, and tech-driven problem solving.

SKILLS

Concepts: Communication, Mentorship, Data Modeling, Computational Analysis, Responsive Web Design

Experienced: Figma, Git, R, tidy, dplyr, ggplot2, R-Shiny, HTML, CSS

Proficient: JavaScript, React, Next.js, WordPress, Python, Pandas

Familiar: Canva, Plotly, d3.js, PHP, ARIA

EDUCATION

University of Washington

Bachelor of Science in Computer Science

Seattle, WA

December 2024

- 3.5 Grade Point Average
- Dean's list: Summer and Autumn 2023, Autumn 2024
- Mathematics for Computation Workshop, Teaching Assistant, Autumn 2022
- Ability – Student Organization, Co-Chair, 2024

EXPERIENCE

KBCS – Radio Station

Operations Support Specialist

Bellevue, WA

September 2024 - Present

kbc5.fm

- Collaborating with staff to identify usability issues with website and survey data through stakeholder interviews.
- Mentoring data analytics intern by teaching fundamentals in R and Python (Pandas) to support the successful development of a dashboard in the R-Shiny publishing framework with Plotly in 6 months.
- Communicating with intern to identify dashboard development techniques that use tidy data, ensure privacy for survey respondents, are statistically accurate, and meet security requirements of Bellevue College IT.
- Identifying usability problems with the production website using manual and automated accessibility testing to check compatibility with assistive technology such as screen readers and screen magnifiers.
- Refactoring the KBCS WordPress theme to comply with Web Content Accessibility Guidelines (WCAG) by using semantic HTML and ARIA, with code review on GitHub by IT Services on GitHub.
- Testing the updated WordPress theme for compatibility with assistive technology, visual bugs and non-visual bugs and ensuring that theme is built for Search Engine Optimization (SEO).
- Resulting site has fewer WCAG violations, better responsive web design (RWD), and improved SEO, increasing the organic referrals from Google by two times in less than three months.

High Speed Rail – Project

Data Analyst and Frontend Engineer

University of Washington

October 2024 – December 2024

drewking.dev/projects/high-speed-rail/

- Designed an interactive visualization using the d3.js library that illustrates the potential for high-speed rail in the United States by allowing people to create their own theoretical high speed rail network.
- Aggregated geospatial and census data in R by using statistical methods to calculate the estimated ridership for a potential high speed rail line between each major population hub, improving visualization render time by tenfold.
- Engineered web-based visualization of this data using state management techniques in React for partial re-rendering of the chart, this reduced visual artifacts during interaction and improved responsiveness.
- Built CI/CD deployment pipelines to publish changes on GitLab to the web, enabling better collaboration.
- Communicated regularly with a team of software engineers to meet deadlines, incorporate peer feedback, and earn a perfect score on the project in five weeks.

MindMii – Project

UX Designer

drewking.dev/projects/mindmii

Seattle, WA

March 2023 - June 2023

- Designed and executed a diary study on texting behaviors with the Huskies for Neurodiversity community.
- Collected and summarized analyses from journal entries, focusing on communication needs of study participants.
- Analyzed diary study findings to pinpoint sources of communication barriers and create user personas.
- Created iterative Figma design mockups for the MindMii app, incorporating feedback to improve design quality.
- Resulted in a perfect score on the project and an award from the course staff for best project.

University of Washington

Teaching Assistant – Mathematics in Computation Workshop

Seattle, WA

September 2022 - December 2022

- Mentored students in a math seminar at The Allen School on problem solving and proof writing techniques.
- Listened to feedback from students and tailored communication to meet the needs of each student.
- Enabled students to succeed by providing them with assignment feedback that was direct and constructive.

RESEARCH

CREATE Lab, University of Washington

Research Intern

Seattle, WA

January 2024 - July 2024

- Investigated heuristics for creating an authoring tool for researchers that publishes data visualizations that are accessible and interpretable to blind/low-vision screen reader users (SRUs).
- Retrieved, read, and summarized existing research on accessible data visualization for SRUs.
- Created a taxonomy of different data visualizations from research to represent them in a non-visual format.
- Designed lo-fidelity paper prototypes of authoring tool and high-fidelity prototypes in Figma.
- Communicated findings and designs with lead full-stack software engineer and principal investigator weekly.

Infectious Disease Lab, Fred Hutch

Research Intern

Seattle, WA

March 2021 - August 2021

- Analyzed synthetic experiment data to establish guidelines on variable selection in data modeling algorithms with small datasets and many dimensions to assist bioinformaticians modeling data from people with rare diseases.
- Learned R tools including tidyr for data cleaning, dplyr for aggregating, and ggplot2 for visualizing by taking a dry lab seminar offered to Fred Hutch employees taught in R.
- Applied computational analysis and data modeling techniques, taught by the Principal Investigator, to develop visualizations of preliminary experimental results within 6 months and support early-stage data interpretation.
- Co-authored research paper published in The New England Journal of Statistics in Data Science.

VOLUNTEERING

Ability – Student Organization, University of Washington

Co-Chair

Seattle, WA

January 2024 - December 2024

- Collaborated with a team of five students to create impactful events centered around technology and accessibility.
- Onboarded officers for Student Relations and External Relations, teaching org structure and job-specific tasks.
- Edited student created slideshows and documents in G-Suite, checking for accessibility and design fidelity.
- Trained Student Relations Officer on visual design techniques for designing marketing materials in Canva.
- Mentored successor for Co-Chair role by communicating functions and providing opportunities to lead meetings.
- Facilitated an environment of open communication which led to five successful student run events.

Ability – Student Organization, University of Washington

Student Relations Officer

Seattle, WA

June 2023 - December 2023

- Recruited students for events and leadership roles at a small student organization by communicating with peers.
- Designed marketing materials in Canva using techniques learned from a visual design course at UW.
- Maintained a mailing list of all active and prospective members and created engaging emails for recruitment.
- Marketed events by posting advertisements on social media, on campus with flyers, and through word of mouth.
- Resulted in seven well attended events and promotion to Co-Chair.