Daniel Blanchard

Email: daniel.s.blanchard97@gmail.com | Phone: (801) 232-3445 | Portfolio: https://portfolio.do.danielblanchard.click

Education

Brigham Young University | Provo, UT   **Expected Graduation December 2023**
B.S Computer Science (GPA: 3.82)
- *Minor in Manufacturing Engineering*

Experience

Expedia Group | Seattle, WA

Software Development Engineer Intern   **May 2023 – Aug. 2023**
- Led end-to-end development on an internal software license request portal app resulting in improved visibility in the request lifecycle, allowing users to track progress, understand workflow stages, and identify points of contact, reducing communication bottlenecks
- Applied Agile methodologies to plan and design a user-centric app, incorporating feedback during UX/UI development
- Automated report generation by developing Python scripts, saving about 10 hours of manual work per week
- Developed a dynamic classification/visualization component efficiently mapping license request statuses for 30+ complex workflows

L3Harris Technologies | Salt Lake City, UT

Software Engineering Intern   **May 2022 – Aug. 2022**
- Achieved a 400% improvement in IBIT test speed by redesigning algorithms and introducing incremental signal waiting
- Successfully addressed over 10 major defects in an interim software release for an embedded system, bolstering product reliability
- Developed and ran 50+ unit tests to ensure software compliance with government requirements using internal hardware interfaces

CG Industrial Specialties, Ltd. | Provo, UT

Software Development Intern   **Aug. 2021 – May. 2022**
- Led development of app to simulate chemical and physical reactions in an autoclave, advancing understanding of valve technology
- Cut memory usage by more than 500% by implementing a data cache and improving algorithm design for matrix calculations
- Improved application UI performance by offloading several computational tasks to different threads

Micron Technology Inc. | Boise, ID

Metrology Equipment Engineer Intern   **May 2021 – Aug. 2021**
- Created a script to parse and visualize tool sensor data during process failures, leading to the identification of correlations in a tool
- Crafted a mixed reality Standard Operating Procedure for HoloLens 2, resulting in a 50% reduction in training costs for tool changes

Brigham Young University | Provo, UT

Web Development Teaching Assistant   **Aug. 2022 – May 2023**
- Facilitated learning of JavaScript & React by providing technical support, debugging assistance, and code review to 250+ students
- Aided in creation of 5+ labs to help students learn fundamentals of full stack development and common web technologies

Research Assistant   **Jan. 2020 – May 2022**
- Created a transient thermal model that predicts temperature in the interface of a friction weld resulting in improved flow stress data
- Developed application to calculate the volume of extruded material during a friction weld reducing a 5-hour task to just 2 minutes

Skills

Languages: Java | Python | Typescript | JavaScript | C# | C/C++ | HTML/CSS
Technologies: React | Next.js | Node.js | Android | Vue | AWS (EC2, Lambda, S3) | Git | MongoDB | Linux | SQL
Other: Spanish | Full-Stack Development | Web Development | Agile | Object-oriented programming

Projects and Activities

Autoclave Simulation Software (Capstone) – *(C#, WPF, XAML, Simulink)*
- Desktop application that dynamically visualizes chemical and physical reactions in an autoclave refinement process

Twitter Clone Android App and Server – *(Java, Android, AWS (Lambda, API Gateway, S3, SQS, DynamoDB), MVP)*
- Twitter clone utilizing AWS with a focus on employing effective architecture and adhering to Java design patterns

Metallography Tools App – *(React.js, JavaScript, Next.js, Node.js, HTML/CSS)*
- App that uses the shell method for precise volume calculations of outlined areas of interest on tube cross-sections

BYU YHack Hackathon (2nd Place Overall) – *(React.js, JavaScript, Next.js, Node.js, Express, HTML/CSS)*
- A ChatGPT-powered web app for building brand identity as an interactive story, inspired by Spotify's Wrap

Leadership

BYU Association of Computational Machinery – *Events Officer*   **Apr. 2022 – Aug. 2023**
- Organized and planned club events to help CS students prepare for interviews and network with professionals

Society of Manufacturing Engineers - *Student Relations Committee Member*   **Jan. 2022 – Dec. 2022**
- Chosen among three students nationwide for a role on a committee improving professional and student chapter relations.

BYU Society of Manufacturing Engineers – *Vice President*   **Aug. 2020 – Apr. 2022**
- Achieved 200% increase in recruitment earning a nationwide SME award for leading student chapter member acquisition