


# JACOB ALSPA W

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## FULL-STACK SOFTWARE ENGINEER

Versatile and motivated software engineer with 5 years of experience in industry as a full-stack developer. Seeking position that will use my engineering / design skills to add significant creativity, talent, and professional service to company ventures.

## EXPERIENCE

**JANUARY 2021 – PRESENT**

### SENIOR FRONT-END DEVELOPER & FULL-STACK SOFTWARE ENGINEER

IBM URBANCODE VELOCITY, HCL ACCELERATE

- Routinely writes and manages features using React, Sass, Apollo, GraphQL, MongoDB, and Git
- Consistently make changes to front-end code to improve performance of slow-to-load components
- Conducts technical design, UX design, coding, code review, bug fixes and integration with other DevOps tools
- Solves complex design problems to maximize user experience through collaboration with design teams
- Identified and fixed various performance traps that resulted in web pages rendering up to 125x faster
- Singlehandedly redesigned and updated many core feature pages to ensure UI/ UX meets design guidelines
- Incorporated automated, end-to-end browser tests for existing and new user scenarios with TestCafe
- Converted existing and new components to TypeScript to improve overall code-quality

**MAY 2019 – JANUARY 2021**

### FRONT-END LEAD & FULL-STACK SOFTWARE ENGINEER

IBM URBANCODE DEPLOY, HCL LAUNCH

- Manages the efforts of the front-end development team responsible for producing, maintaining, and modifying web front-end code for two major DevOps software product offerings through IBM and HCL Software
- Ensures that correct content, product assortments, and UI functionality is developed, tested, scheduled, and validated against business expectations before it is released to clients
- Solves complex design problems to maximize user experience through collaboration with design teams
- Reduced known UI defects in product backlog by over 90% in less than 10 months to improve client relations
- Established automated processes that allowed the product to be split into different IBM and HCL brandings

**MAY 2019 – PRESENT**

### CLIENT ADVOCATE AND SUPPORT TECHNICIAN

IBM URBANCODE DEPLOY, HCL LAUNCH

- Collaborated as part of an international support team with IBM and HCL engineers to maintain company relations and meet SLA on issues that impact millions of dollars in financial investments
- Maintained personal relationships with high-profile customer accounts that need a dedicated advocate for their issues

**MAY 2016 – AUGUST 2018**

### SOFTWARE ENGINEER INTERN

POINTE BLANK SOLUTIONS

- Developed an enterprise suite of web applications that streamlines the justice process and integrates law enforcement agencies, prosecutors, courts and defense attorneys in fifty plus counties across Ohio
- Routinely performed full-stack feature development and system maintenance using C#, SQL Server databases, ASP.NET MVC, HTML5, CSS3, JavaScript, Typescript, jQuery, KnockoutJS, both server-side and client-side rendering systems, code ownership paradigms, automated deployment systems, version control systems such as Git and Mercurial Hg, and mass integration / unit testing
- Developed tooling for Microsoft Visual Studio Team Services to integrate tickets into legacy on-premises software and offer ways for employees to track and record time for payroll purposes
- Invited back for multiple rotations as an intern, part-time employee, co-op student and scholarship recipient

**AUGUST 2018 – MAY 2019**

### PROJECT FOUNDER & LEAD ENGINEER

YOUR CAMPUS, CWRUded

- Designed and developed a data-driven web service (NodeJS, MongoDB, React), and iOS mobile application with senior university faculty that computed and conveyed real-time “busyness” metrics for various locations around campus
- Solution leveraged address resolution protocol (ARP) and Cisco Prime Infrastructure API that manages CWRU wireless network to expose and aggregate unique active clients connected to wireless access points throughout campus
- Planned and lead meetings with campus deans, network admins, and IT marketing team to bring service to students

#### **AUGUST 2018 – DECEMBER 2018**

##### **PROJECT MANAGER & FRONT-END LEAD**

###### **SYNCHRONY**

- Developed a synchronized streaming service that enhances the music listening experience of users through shared playlist collaboration and discovery
- Synchrony acts a wrapper to mainstream music providers by capturing and relaying their streams to lobbies where listening groups could communicate using real time communications
- Directed team members throughout project duration to ensure project milestones were met and delivered
- Responsible for flexible UI/UX design and implementation using Angular, Sass, and Git
- Academic honors for best senior project in CWRU electrical engineering and computer science departments
- Spotify later adopted our service’s model for synchronized streaming within lobbies

#### **AUGUST 2018 – DECEMBER 2018**

##### **PROJECT MANAGER & LEAD ENGINEER & LEAD DESIGNER**

###### **PI CLOCK**

- Designed and developed a smart alarm clock that improves upon traditional alarm clocks by integrating new and useful technologies to motivate users to get out of bed on time
- Raspberry Pi based system increases user productivity by helping them overcome their early morning exhaustion and by providing general information about their upcoming day (weather data, appointments, commute time, news, etc.)
- Qt/C++ software integrated with Google Distance Matrix, Google Calendar, Google News, and Yahoo Weather
- Directed team members throughout project duration to ensure project milestones were met and delivered
- Created a series of brain-games that increase mental stimulation in the early mornings

#### **APRIL 2015 – FEBRUARY 2016**

##### **PROJECT MANAGER & LEAD DEVELOPER**

###### **LYGENT**

- Served as project manager and lead developer of a novel vision screening tool (iStrab™) intended for the measurement of strabismus in children, a treatable disorder in which the eyes become misaligned
- Awarded \$25,000 grant from the Innovation Fund to continue development of the iStrab™ diagnostic equipment
- Project is closely associated with University Hospital’s eye clinic and CWRU, and was pending FDA clearance in 2016
- Worked closely with clinical researchers at University Hospitals, explored various solutions to measure misalignment of eyes, and updated technical designs given principal investigator’s feedback

#### **JANUARY 2016 – MAY 2019**

##### **TEACHING ASSISTANT & PEER TUTOR**

###### **CASE WESTERN RESERVE UNIVERSITY**

- Reinforced course work during tutoring sessions and recitations to boost students’ academic performance
- Customized instructional approaches to meet the academic needs of diverse clients across a variety of courses
- Collaborated with faculty members to ensure lesson plans addressed students’ strengths/weaknesses

#### **JANUARY 2015 – DECEMBER 2016**

##### **WEBMASTER**

###### **CWRU - DELTA SIGMA PHI**

- Designed, created, and maintained website for local fraternity chapter
- Routinely incorporated new content for upcoming events and changes in membership

## PERSONAL PROJECTS

**JANUARY 2018 - MAY 2018**

### NIGHT OWL MEDIA CENTER

An affordable and cost-effective alternative to traditional smart-TV adapters. Use the Night Owl media center software in tandem with a Raspberry Pi to transform your old TV into something better. Developed using C++ and the Qt framework. Integrates with most popular streaming services: Netflix, HBO, Disney+, Hulu, and more.

**APRIL 2019**

### TRIVIA WEB SERVICE & MOBILE APPLICATION

Compete with your friends and answer from thousands of trivia questions using your iPhone. Track your scores and see how you improve over time. Service comprises of an iOS mobile application backed by an Express server and Mongo database to store trivia questions as documents.

**APRIL 2015**

### EMAIL CLIENT & SPOOFER

Send emails with a simple MATLAB mail client. Authenticate with a variety of mail services including Gmail, Yahoo, Outlook, AOL, and more. Draft your thoughts, add attachments, and then send mail to the people of your choosing. Includes optional capabilities for spoofing the sender's address.

**MAY 2019 - MAY 2019**

### ELECTRONIC PHOTO FRAME

An affordable and cost-effective alternative to traditional electronic photo frames. Easily upload photos to your Dropbox account and watch as the software seamlessly displays your photos on the medium of your choosing. Developed using C++ and the Qt framework. Intended for use with a Raspberry Pi.

## EDUCATION

**MAY 2019**

### B.S. in COMPUTER SCIENCE

#### CASE WESTERN RESERVE UNIVERSITY

- Degree path: B.S. in Computer Science with a focus in Software Engineering
- Major GPA: **3.634 / 4.0**
- Relevant coursework: object-oriented programming, systems programming, algorithms, databases, systems security and networks, discrete mathematics, data structures, software design techniques and craftsmanship, mobile application development, programming language concepts, team organization and project management

## TECHNICAL SKILLS

JavaScript, TypeScript, Java, C#, Swift, C++, SQL, NoSQL, HTML5, CSS3, React, Angular, GraphQL, Apollo, Qt, MATLAB, Node, ASP.NET MVC, Git, Mercurial, Yarn, npm, Photoshop, Agile, Scrum, DevOps, CI/CD, TDD, Jira, Jenkins, Salesforce

## PERSONAL SKILLS

- Strong work ethic
- Dependable
- Positive attitude
- Team oriented
- Self-motivated
- Flexible
- Forward thinker
- Effective communicator

## OTHER

**APRIL 2018 – MAY 2019**

### FOSTER CARE VOLUNTEER

#### CLEVELAND ANIMAL PROTECTIVE LEAGUE

**AUGUST 2014 – OCTOBER 2015**

### VARSITY SWIMMING & DIVING

#### CASE WESTER RESERVE UNIVERSITY

MARCH 2014 – JULY 2015

SWIMMING INSTRUCTOR

SWIM AMERICA