

# ALEX NEVILLE

## Education

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### **Brigham Young University** | Provo, UT | 2020 — 2022

- **Major:** Computer Science, M.S.
- **Coursework:** Computer Vision, Computer Security, Pentesting, UX Design, Advanced Computer Graphics, HCI
- **GPA:** 4.0 / 4.0

### **Brigham Young University** | Provo, UT | 2015 — 2019

- **Major:** Computer Science, B.S.
- **Emphasis:** Animation
- **Minors:** Mathematics and Creative Writing
- **Coursework:** Algorithms & Data Structures, Discrete Math, Web Development, Software Design, Computer Graphics, A.I., Systems, Android Development, Shaders, Game Design, Film Production

## Employment

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### **Software Engineer, Intern** | SimpleNexus | *Summer of 2021*

- As a full-stack developer, I used Ruby on Rails, Vue.js, and GraphQL to improve the mortgage loan application process for borrowers.

### **Web Developer** | BYU Administrative Services | *September 2020 — Present*

- Rewrote the BYU Cell Phones website, which allows faculty and alumni to enroll in custom cell phone plans through the university, using test-driven development and the MEAN stack.

### **Software Engineer 1** | Sling TV | *May 2019 — June 2020*

- Integrated live and on-demand adaptive video streaming with various hardware platforms using Typescript and the Bitmovin API.

### **Software Engineer, Intern** | Sling TV | *Summer of 2018*

- Ported a standalone video player from JavaScript and AngularJS to Typescript and Angular 6.

### **Teaching Assistant, Java & Android Development** | BYU Computer Science | *August 2016 — April 2019*

- Taught instructive help sessions in data structures, SQLite databases, algorithms, client-server architecture, and mobile application development. Reviewed code and unit tests for quality.

### **NOC Analyst** | BYU Office of Information Technology | *January 2015 — April 2016*

- Used Nagios to monitor alerts and escalate campus network issues. Provided 24/7 technical support to end users.

## Software Projects

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### **Slack Message Automater**

- Wrote a script in Python that automatically posts video messages to a specified Slack channel.

### **Alexa Skill: Theme Park Facts**

- Created an Alexa skill, using JavaScript and AWS, which gives a random fact about theme parks when prompted.

### **Photomanipulation Shader**

- Wrote a shader in GLSL that changes a photograph to grayscale, negative, sepia, and color.

### **Video Game: CarniVile**

- Coded a first-person shooter video game with Unity and C#, themed to a haunted carnival.

## Group Projects

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### **Club President** | BYU Theme Park Engineering & Design Club | *October 2018 — Present*

- Led groups of 2-8 students in various engineering/design competitions. Delegated tasks, followed deadlines, and created 3D concept art. We qualified for the semifinal round of Disney Imaginations in 2019.

### **Visual Effects Technical Director** | BYU Animation | *January 2018 — Present*

- Used Houdini and Python to create fluid, fire, and shatter simulations, as well as tools to improve the pipeline.

## Skills

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**Coding:** Python, Java, Typescript, C++, OpenGL, Git, HTML/CSS, C#, C, Angular, Node, Matlab, SQL, Bash, Unity, Chromecast API.