Zachary Dixon

Contact Information

Email: zach@zdixon.com Latest Resume: zdixon.com

Work Experience

2019 - 2020 | **Microsoft | Software Engineer - Azure IoT Plug and Play**
Worked on design and implementation of multiple features for PnP's Pubilc Preview Refresh and General Availability releases. Specific work included Digital Twin notifications in IoT Hub and DPS integration.
C#, Service Fabric, Cosmos DB, Geneva Runners

2018 - 2019 | **Microsoft | Software Engineer - Azure IoT Solutions**
Worked in a variety of areas to support Azure IoT Solution, Device Certification, and Device Catalog offerings. Specific work included enabling IoT Edge Device Certification, migrating Solution deployment to a new infrastructure, writing device creation UI for the catalog, creating automatic UI testing, creating Kubernetes-based testing, and prototyping an improved end-to-end IoT device developer onboarding experience.
C#, Docker, Typescript, React, IoT Edge, Azure Pipelines / CDPx, Kubernetes, Selenium, Python, Unix, SDL Compliance

2017 - 2018 | **Brown University/Fidelity Investments | VR Research**
3D database visualization in a VR environment and contributions to Brown's MinVR VR graphics platform.
C++, OpenGL, Brown YURT, OpenVR (Vive)

2017 | **Brown University | TA - Computer Systems Security**
Wrote/graded assignments, managed cloud VM-based hands-on scenarios.
C, Bash, Go, PHP, JavaScript, SQL

2016 | **Citrix Systems, Inc. | Software Engineer Intern - Microsoft Solutions Team**
Worked with cloud computing to create internal automation tools and explored future features.
Microsoft Azure, PowerShell, C#

Education

B.Sc Computer Science, Brown University May 2018 Cumulative GPA: 3.7, Last 2 Years: 4.0

Areas of Focus

AI	CS141, CS143, CS1951R, CS2951W
Security	CS166, CS1800, TA Experience
Graphics	CS123, CS2951W, VR Research Experience
History	Enough credits for a History BA

Notable Projects

Approximating Lighting with a Conditional Generative Adversarial Network Github | Paper
Used a cGAN to approximate a simplified version of the rendering process. Fall 2017
Implemented using TensorFlow in Python - CS2951W

CNN-based eye-tracking using webcam images Paper
Used a convolutional neural network to predict eye tracking locations using webcam data. Fall 2017
Implemented using TensorFlow in Python - CS1430

Technical Skills / Personal

Proficient: C#, Docker, Typescript, Python,
Familiar: C++, Java, C, React, IoT Edge, Azure Pipelines / CDPx, Selenium, OpenGL, HTML/CSS, PHP, SQL, Go, Assembly, OCaml, Racket
Tools: Azure, Service Fabric, Kubernetes, Development on IoT Devices, VR Development, Tensorflow, ROS, Photoshop, Adobe Audition, Git, Linux, Windows, LaTeX
Languages: English (fluent), Spanish (intermediate)
Interests: Host/maintain a film-related podcast, photography (Flickr Page), film editing (YouTube Page), outdoor activities (hiking, backpacking, fishing), studying history, tinkering with Raspberry Pis and home automation, video games, taking care of my dog