# DAO NGUYEN

## EXPERIENCE

**Comcast NBCUniversal**: CORE Technology Associate          July 2016 - Present

- The CORE Technology program is a two-year rotational engineering and leadership development program that provides the opportunity to work with 3 different teams within Comcast NBCUniversal

### Comcast, Watchwith: Software Engineer          January 2018 - Present

- Develop Force Extend, an **Angular** web application using **TypeScript** which allows real-time extensions for DVR listings' duration
- Implement Watchwith Runtime, a runtime environment for delivering enhanced content on the X1 platform using Watchwith's curated metadata and **pxscene** library
- Integrate the Watchwith platform with internal teams' products (NBC The Voice, Fandango) to enhance interactive content experiences on the X1 platform

### NBCU, Global Media Operations: Software Engineer          July - December 2017

- Worked on detailed timing statistics of uncompressed IP Video stream provides insight to the unique needs of the next-generation technology **SMPTE ST 2110-21** (github.com/quarker/stream-metrics)
- Built various **Node.js** microservices that allow broadcast engineers to keep track of millions of baseband and IP connections empowering the broadcast system at NBCU
- Worked with both public (**AWS**) and private clouds. Stood up CI/CD environment (**Jenkins**)

### Comcast, Core Application Platforms: Software Engineer          July 2016 - June 2017

- Developed for CodeBig, a cloud-based API management proxy which protects over 700 internal back-end services by rejecting traffic over 348 million transactions each month
- Supported clients empowering high-profile applications during daily routine support and on-call
- Developed and deployed **Lua**-based API and self-service portal using **GraphQL** and **React**

**Comcast, Data Center**: Network Engineer          March 2015 - May 2016

- Deployed, monitored network nodes and performed capacity planning in both Comcast's National and Regional Data Centers
- Built an automation program to configure multivendor routers/switches for 20+ network engineers
- Developed a **StealthWatch** mapping to oversee traffic of Comcast Tier 1 critical aplications

**Drexel Wireless Systems Lab**: Research Assistant          June 2015 - June 2016

- Designed commercial-off the-shelf (COTS) and **802.11n** protocol compliant testbeds for wireless security algorithm evaluation, penetration testing, and marketability
- Built a wireless security system that authenticates users at the physical layer (PHY) without transmitting encryption key
- Integrated reconfigurable antenna to enhance performance in varying propagation conditions

## PROJECTS

**Universal Kids Studio**          October 2017

- Built a platform that allows kids to create their own stories using voice commands via Amazon Echo
- Developed a serverless architecture using **Amazon S3** for stories storage and **Amazon SQS** for mobile push notifications. The created stories were displayed on an iOS app.
- Won Amazon-sponsorship award for the best use of Amazon services

---

✉ dao_nguyen@comcast.com

📞 267-559-2120

in linkedin.com/in/daonguyen93

○ github.com/quarker

## EDUCATION

**Drexel University**

**Double Major**  Electrical and Computer Engineering, B.S. Graduated 2016, GPA 3.89/4.0

## SKILLS

### Areas of Experience

Cloud Orchestration/Automation
Full Stack Development
Network Engineering
Video Distribution
Wireless Systems
Agile/Scrum
DevOps

### Languages

| | |
|---|---|
| Advanced: | **JavaScript, Python** |
| Intermediate: | **Java, Lua, SQL** |
| Familiar: | **C/C++** |

### Frameworks

| | |
|---|---|
| Advanced: | **Express, GraphQL** |
| Intermediate: | **Mocha, Lapis** |
| Familiar: | **React, Bootstrap** |

### Tools

| | |
|---|---|
| Advanced: | **Git, Splunk, Linux** |
| Intermediate: | **Wireshark, Ansible, AWS Services (RDS, Route53, Lambda)** |
| Familiar: | **MATLAB, Api.ai** |