

# Nicholas Mowery

LinkedIn Profile | Portfolio  
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Washington, D.C.

## EXPERIENCE

### APPLIED RESEARCH ASSOCIATES | JUNIOR GIS SOFTWARE ENGINEER

January 2021 – Present | Arlington, VA

- Contributed to projects supporting and powering science in Health, Infrastructure, Energy/Environment, and Defense.
- Significant Project Contributions:
  - Visualize and map flow/pressure-head in hydraulic water networks (Java)
  - Model dynamic hydraulic water networks (Java)
  - Store and parse neutrino sensor data (Python)

### CYBERTINFRASTRUCTURE INTEGRATION RESEARCH CENTER | STUDENT GIS SOFTWARE DEVELOPER

May 2020 - January 2021 | Bloomington, IN

- Work on NASA JPL Quakes-A Team under P.I. Andrea Donnellan
- Rebuild GeoGateway (a mapping and analysis tool for geophysicists at JPL) from scratch with new software stack
- Some of the technologies used: Vue.js, Django, Leaflet, Docker, Apache Airavata
- Contributed to article published in Earth and Space August 2021 edition:  
Buried Aseismic Slip and Off-Fault Deformation on the Southernmost San Andreas Fault...

### GOOGLE SUMMER OF CODE | STUDENT DEVELOPER @ APACHE SOFTWARE FOUNDATION

May 2020 - September 2021 | Bloomington, IN

- Work to improve supercomputing platform Apache Airavata
- Implement Apache Airavata in GeoGateway
- Learn how to effectively contribute in open-source community

### INDIANA GEOLOGICAL AND WATER SURVEY | DIGITAL PROJECT ASSISTANT

April 2019 - September 2019 | Bloomington, IN

- Develop virtual map tours for Megajeff IU Bicentennial project
- Extend ArcGIS Storymaps with custom HTML, CSS, and JS
- Digitize fossilized remains of Megajeff for 3D modelling

### IUB CENTER FOR INNOVATIVE TEACHING AND LEARNING | INSTRUCTIONAL TECHNOLOGY CONSULTANT

April 2018 - April 2020 | Bloomington, IN

- Consult IU faculty on use of instructional technologies
- Develop unique instructional tools for faculty
- Consult faculty on course development and enhancement
- Develop instructional courses for teaching assistant training

## EDUCATION

### INDIANA UNIVERSITY | BS IN COMPUTER SCIENCE

Luddy School of ICE, | May 2021 | Bloomington, IN

Philosophy Minor • UROC Student • President of Philosophy Club • Luddy Student Scholarship • Founders Scholar • GPA: 3.7

## LANGUAGES

### PROGRAMMING AND SCRIPTING

Most Familiar:

Java • JavaScript • C • Python • HTML/CSS

Familiar:

Bash/Shell • R •  $\text{\LaTeX}$  • MySQL • C++

### SPOKEN & WRITTEN

Native fluency:

English, Spanish

Reading fluency:

English, Spanish