

## Objective

Seeking a ... position where my experience in ...  
& cloud ...

## Education

Bachelor of Computer Science, Minor in GIS - University of North Carolina, Chapel Hill, NC 2018 - 2021

**Software Skills** (Soft Skills): Adaptability, Creativity, Deductive/Inductive Reasoning, Honesty, Teamwork

Programming Languages	Python (4 y)	JavaScript(4 y)/TypeScript(3 y)	Other Languages
	- Anaconda, PyCharm - arcpy, pyqgis, pyqt - GDAL, Pandas,Django - unittest, pytest,sphinx	- Vue (2 y), React (2 y), Angular (1 y) - Next.js, Express, jQuery, Node, D3.js - Webpack, Babel, JSDoc, ESLint, Jest - SSR, CQRS, Google Analytics, Leaflet	- HTML & SCSS/CSS(4 y.) - Java (3 y), SQL(3 y) - C#,C++ (1 y), R (1 y) - WebAssembly (1 y)
*university *professional *both			
Experienced With	Frontend	Backend	Dev Ops
	-Nuxt +Pinia - React +Redux - Angular +NgRx	- PostgreSQL - ASP.NET - SQLite - Apache, Nginx - Client-side DBs	- Git/Hub/Lab - Jira+Confluence - Gradle+Maven - CMake - Docker+Kubernetes
			Platforms/Services
			- ArcMap, ArcGIS, QGIS - Potree, Mapbox, Cesium - Android (Java) - Azure (AKS), AWS (S3) - NOAA, USGS, Public GIS - Cloudflare, WordPress

## Professional Experience

**Mapping Software Engineer @ DEKA Research & Development (Manchester, NH) Sept 2021 - Aug 2023**

- As a team of two engineers, we designed, developed, and scaled ETL pipelines to process (billions of points) 3D *LiDAR* scans of deployment regions of an inner suburban city. (Airflow, PCL, PDAL, *SFTP*, *DeterminedAI*) Algorithms included: *SLAM, Aided INS, Voxels, K-Dtrees, Octrees, Filters, Colorization, Multiprocessing*
  - Apart of a team of six engineers, we developed and deployed a secure web app to support client access to 20+ autonomous robot real-time sensing and inference data transported through cloud platform to dashboard feed. (*Nuxt, C#.NET, Docker, Kubernetes*) *Unit, Snapshot, Integration* Tests: (*Jest, Mocha, WebDriverIO*)
- Technologies* : Linux · Microservices · PostGIS · Teleops · Dashboard · Leaflet · WebSockets · WebRTC · FFmpeg

**Customer Success Intern & Graphic Design Intern @ nCino, inc. (Wilmington, NC) Jun 2019 - Sept 2019**

- Professional experience mentored by a variety of employees from customer success, marketing, & product dev.
  - Tasked with learning domain level knowledge of how *nCino* & *Salesforce* is implemented.
  - Work included writing *unit tests, form automation, manual testing*, supporting *bug fixes*, writing *custom logic* & *actions*, & build *user interfaces*; also provide direct consultation to clients and team.
- Technologies* : Apex Tests & Triggers · Platform APIs · Graphic Design · SOQL/SOSL · Visualforce · Architecture Diagrams

**IT Intern & Database Admin @ Hardee Hunt & Williams (Wrightsville Beach, NC) Jan 2014 - Jun 2016**

- Through John T. Hoggard High School, I initiated a CTE Internship for experiential credit hours managing the mailing list database and use graphic design softwares and tools to publish and market flyers, postcards, and more.
- Technologies* : Mail Management · Adobe Photoshop · CSV · Microsoft Excel · Python Scripting · PowerShell

## Projects & Skills & Involvement & Interests

**UNC-CH Software Engineering Lab: Neural Network Playground - 2020**

- On team of 4 students we scripted data visualization HTML reports for UNC-CH graduate research analysis.
- SubFlow: A Dynamic Induced-Subgraph Strategy Toward Real-Time DNN Inference and Training (*D3.js*, *React*, *Figma*, *CUDA*, *TensorFlow*)
- Fast and Scalable In-memory Deep Multitask Learning via Neural Weight Virtualization (Lee, Seulki & Nirjon, Shahriar, ed.)

**Carolina AR/VR: FranklinARGallery - 2020**

- This web application brings mobile AR art gallery experiences to participating businesses in Chapel Hill, NC. (*React*, *Firebase*, *Node.js*, *AR.js*, *JSON*, QR code)

**UNC-CH Mobile Sensing & Inference Systems - 2020**

- For the final project I was tasked to develop an mobile app that implements a pre-trained image classification model, an embedded database, and must run a audio player in the background and track & visualize user data. (Android Studio, *SQLite*, *TensorFlowLite*, *Gradle*)

**UNC-CH Programming Languages - 2020**

- Over the semester, we developed a Java application and built & trained a Weka ML model for determining safe social distancing and then rewrote logic and inferencing system to translate to a...  
Lisp Interpreter => Lazy Lisp Interpreter in Prolog => Prolog Interpreter in Standard ML  
(*LispLambda*, *SmallTalk*, *Functional*, *Declarative*, *Procedural*, and *Compiler* Languages)

*Other* : Intermediate German Speaker, Sigma Phi Epsilon, FOSS+Public Benefit, Dog(Pug), Retro Arcade Games, Cooking, Ocean