

Objective: Now I am seeking more experience as a Software Developer/Engineer working with Large-Scale Real-Time Information Management Systems that rely on critical response, and creating human-machine interfaces for professional, governmental, strategic, tactical, and public systems of geospatial data.

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 (5 y)	JavaScript/TypeScript (4 y)	Other Languages
*educational *professional *both	<ul style="list-style-type: none">- ArcPy, PyQGIS, PyQt- Flask, (Geo)Django- (Geo)Pandas, GDAL- SQLite, PostGIS	<ul style="list-style-type: none">- Vue.js, React, Angular, WebAssembly- JSX, Mapbox, Leaflet, Google Maps- D3.js, WebDriver, Webpack, Vite, Jest- Node.js, Redux, Pinia, Local Storage	<ul style="list-style-type: none">- HTML, SCSS/CSS, SQL- NoSQL, Java, Groovy, C- C#, C++, R, VB, CLISP- PHP, SWI-Prolog, SML/NJ

Professional Experience

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

- As a team of 2 engineers, we designed and developed point cloud processing tasks for pipelines utilizing CI/CD. To handle billions of points we parallelized tasks and leveraged cloud storage & GPUs for memory & computation.

Algorithms & Data Structures : Voxels, K-D Tree, Octree, Occupancy Grid, Global/Local Registration

- I maintained 30+ integration test suites for database management system and contributed to specification releases.
- I trained team members and supervised CAD software for mobile mapping systems and maintained 25+ sq. miles
- I was transferred to a new team of five engineers building a multi-tenant desktop web application capable of video/audio streaming, web mapping, alerting system, automatic vehicle locator, route generation/validation, web asset management, unit & integration test suites, and fleet management (over 6 months of work).

Technologies : Debian Linux, Bash, Robotics, GitLab, .NET Core, Trimble & Applanix, OBS, AWS(S3), Kubernetes, Azure(AKS)

Customer Success 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 test suites, consumer loan form generation, use case testing, bug fixes, and writing custom Apex & Visualforce logic.
- Contributed to customer support on nCino's *consumer loan origination system* and involved in tech consultations.

Technologies : Diagrams, Apex Tests & Triggers, Platform APIs, Consumer Loans, SOQL/SOSL, Visualforce & Lightning Experience

Office Intern @ 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 : Residential Real Estate, Adobe Photoshop/InDesign, CSV, Microsoft Excel, Python Scripting, PowerShell, macOS

Cashier @ Vito's Pizzeria (Wrightsville Beach, NC) Jun 2013 - Dec 2013

Elite Notetaker @ StudySoup (University of North Carolina at Chapel Hill) Jan 2019 - May 2019

Projects & Involvement & Interests

UNC-CH Software Engineering Lab: Neural Network Playground - 2020 (Static Site Generator)

Technologies : D3.js, React, Figma, CUDA, TensorFlow, Jira, WordPress

UNC-CH Mobile Sensing & Inference Systems - 2020 (Native Mobile App)

Technologies : Android Studio, SQLite, TensorFlow Lite, Gradle, Adapter

UNC-CH Experiential Education: Pollocksville, NC: GIS Research & Analysis - 2020 (Rural Development)

Technologies : ESRI, ArcMap, ArcToolbox, ArcObjects, VB.NET, WinForms, ArcGIS Pro, OnTheMap, SimplyAnalytics

Carolina AR/VR: Contributions to Franklin Street AR Art Gallery - 2020 (AR Mobile Web App)

Technologies : JAMStack, Node, Firebase, AR.js, A-Frame

UNC Web Development Club: Contributions to Headless CMS - 2020 (Organization Website)

Technologies : WordPress, Bootstrap, Google Calendars

UNC-CH Greek Life: Sigma Phi Epsilon - House Manager - 2019 (Joined 2018)

Other : Public Safety, Fire Services, NOAA, USGS, State/County GIS, Cloudflare, Open Source, Emulation, Dog(Pug)