

Jackson Hardee

Education

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

Software Skills

Programming Languages	Python (5 Yrs exp.)	JS/TS , HTML&CSS(5 Yrs exp.)	Other Languages	
	- Process Point Clouds - (2D/3D) GIS & HD Maps - QGIS, ArcGIS, & PDAL - Parallel & Multi Processing	- Web-Based Mapping Tools - Interactive Web Application - Full-Stack Web Architecture, - 2D & 3D Web Graphics	- Java (4 Yrs exp.) - Kotlin (2 Yr exp.) - R, C, C++, C#, Bash, PowerShell - Prolog, CLisp, ASM/WASM, SQL	
Experienced With	Frontend	Backend	Dev Ops	App Dev
	- Nuxt/Vue - Qt - Vue - Angular - React - Bootstrap	- Postgres - MongoDB - ASP.NET - Firebase - Flask - Express.js	- Git/Lab/Hub - Jira & Confluence - Docker - Kubernetes - Gradle, CMake - Terraform	- Android Sensing - WebXR - Three.js - Leaflet - Potree - OpenGL/WebGL/WebGPU
			GIS	
			- Spatial Analysis - Remote Sensing - Mobile Mapping - Earth & Space Observation - Environmental Engineering	

Professional Experience

Software Engineer @ DEKA Research & Development (Manchester, NH) Sept 2021 - Present

- Developed & tested a pipeline to process massive 3-D *LiDAR* point clouds for the localization team and integrated into existing mapping database. (*Python, C++ , Java, PostgreSQL*)
- Responsible for overseeing Mobile Mapping Data Processing: includes Aided-INS, Point Cloud Registration.
- Worked with my team to initiate and grow a secure, functional *fullstack* web app to support customer interaction with autonomous security robot. (*TypeScript, Nuxt, C#, Kubernetes, Docker, Azure, WebSocket*)
- Implemented *Unit, Integration, & End2End* for testing web app.
- Attended routine agile sprint meetings; wrote 150+ pages of concise technical documentation

Technologies : Linux/GNU, PostGIS, PCL, PDAL, Groovy, Spock, Mobile Mapping System, Leaflet, Cesium

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

- Met with my manager every week to discuss on-going tasks & attended scrum meetings with Professional Services & Customer Success Team; professional experience mentored by a variety of employees from customer success, marketing, & product development.
- 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.

Technologies : Apex Tests & Triggers, Platform APIs, SOQL/SOSL, Visualforce, Architecture Diagrams

Projects & Skills & Involvement & Interests

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

- Team of four tasked with mocking TensorFlow's Neural Network Playground with content from the following research papers: (*D3.js , Typescript, React*)
 - SubFlow: A Dynamic Induced-Subgraph Strategy Toward Real-Time DNN Inference and Training
 - Fast and Scalable In-memory Deep Multitask Learning via Neural Weight Virtualization

Carolina AR/VR: FranklinARGallery - 2020

- This web application brings mobile AR art gallery experiences to participating Franklin St. businesses. (*Firebase, JavaScript, Node.js , AR.js, A – Frame*)

Other : Intermediate German Speaker, Sigma Phi Epsilon, AgriTech, Astronomy, Web Development, Sensing & Inference Systems