

Nicholas Colvin

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EDUCATION

University of Texas at Dallas Candidate for Master of Science in Computer Science	Richardson, TX December 2023
University of North Carolina at Chapel Hill Bachelor of Science in Computer Science	Chapel Hill, NC May 2020

WORK EXPERIENCE

Self-Employed <i>Software Developer</i>	Durham, NC fall 2021 - present
<ul style="list-style-type: none">Continued software development work for 4th Vector Technologies after leaving the full-time position to pursue schoolDevised a user-friendly setup tool for Cognex VisionPro scripts, enabling clients to independently configure new products in minutes instead of relying on external assistance, vastly improving efficiency and client satisfactionCreated a support chat interface between 4VT and clients via the Slack API, significantly reducing response times	
4th Vector Technologies <i>Vision Systems Engineer</i>	Apex, NC summer 2020 - fall 2021
<ul style="list-style-type: none">Built, installed, maintained, and supported software and hardware for ten industrial machine vision systemsDesigned HMI applications in C# and deployed them to industrial PCs that serve as central control hubs for the systemsDeveloped custom image processing algorithms using a variety of CPU/GPU programming and commercial softwareTrained a deep learning model to classify product anomalies and achieved over 90% precision and recallRevamped the company website, integrating Perch CMS, Google Analytics, and HubSpot to improve SEO scores, increase traffic, and enhance lead generation and client engagementCommunicated with clients to identify needs and translate into tailored software features	
Blue Trading Systems <i>Programming Intern</i>	Chapel Hill, NC summer 2018 - fall 2019
<ul style="list-style-type: none">Produced a single-page application for internal use in F# to display software version numbers running on virtual machines along with system and network informationDeployed a Python web application into a Docker container enabling clients to manage their software instance and plugins, view and filter a live feed of logs, and look up FIX messages	
Lenovo <i>Software Engineering Intern</i>	Morrisville, NC summer 2017
<ul style="list-style-type: none">Applied the MVC model in C# to gather data for the homepage of a Windows applicationWrote unit, integration, and web tests for accessing cloud content within the modelLearned to work in an agile environment, use project tracking and content management software, and relay progress in daily team meetings	

PROJECT EXPERIENCE

Predicting NFL Scores using Sportsbook Odds	fall 2022
<ul style="list-style-type: none">Implemented a multilayer perceptron in Python and compared performance with an MLPRegressor from scikit-learnOrganized a database found online with opening and closing odds from every NFL game since 2007Evaluated the significance of features by removing them from the dataset and comparing summary statistics over ten instances of each model	
OdderJobs	fall 2019
<ul style="list-style-type: none">Led the development of a job board to find or post local odd jobs as a group project using JavaScript and BulmaProvided separate public, private, and user data stores to secure and organize data	

SKILLS

Programming Languages: C#, Python, Java, JavaScript, C, F#
Tools and Frameworks: .NET Core and Framework, Azure DevOps, NumPy, scikit-learn, PyTorch, React, Express.js