

Nick Maleki

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Education

University of North Carolina at Charlotte

- Master of Science in Computer Science | 3.90/4.00 GPA | August 2019 - December 2020
- Bachelors of Science in Computer Science | 3.77/4.00 GPA Magna Cum Laude | August 2017 - May 2020

Technologies and Skills

Programming Languages: Python, LISP, C#, Java, Clojure, JavaScript, TypeScript, Kotlin, SQL, MATLAB, Visual Basic, LABVIEW, Julia, Swift, HTML, XML, CSS, C, C++, React, Lua

Tools, Frameworks, and Operating Systems: Android Studio, Xcode, Altium Designer, SOLIDWORKS, JetBrains, Visual Studio, Atmel Studio, Unity, .NET, .NET Core, Tensorflow, OpenCV, Node.js, mongoDB, Numpy, Pandas, Scikit-Learn, Matplotlib, Seaborn, PyTorch, Flask, VirtualBox, Docker, VMWare, React, PostgreSQL, WebGL, OpenGL, AWS, SQLite, Git, SVN, Agile, Scrum, Windows, Ubuntu, macOS

Certifications: Cisco Certified Network Associate (CCNA), Adobe Premiere Pro, Davinci Resolve Fusion, Microsoft Office Suite Certipoint Certified: Word, Excel, PowerPoint

Leadership

Founder | Recursion | <https://recursion.is> | 2020 - Present

Educational computer science YouTube channel and node-based directed graph notes website that explores the foundations of mathematics, spatial dynamics, quantum mechanics, machine learning, cognitive science, and infinite spatial computing. • *SBCL, cl-opengl, CEPL, SLY, SLIME, Davinci Resolve, C, Python, LUA, DCTL shaders, ACES, Fusion Studio, Fairlight, Node-based compositing, VFX, GFX, PostgreSQL, Blender, Cinema4D, SOLIDWORKS, Altium Designer, SubstancePainter, SubstanceDesigner, Houdini*

President | App Ventures | 2020 - 2021

Lead and taught 150 university students to build Android and iOS applications. Designed fast-paced courses in app development and GUI design. • *Kotlin, Java, Android Studio, Swift, XCode, Adobe CC*

Officer | Web Dev 49 | 2020 - 2021

Lead a group of 50 university students to build websites and web apps. • *JavaScript, TypeScript, React, Vue, Node.js, Firebase, Postman, Django, MongoDB, Flask*

Volunteer Work

Moderator and Vectors Team Member | Inkscape | 2020 - Present

Troubleshooting user issues and bugs in this open source project with over 10 Million Users. • *C++, Python, SVG 2*

Mentor | FIRST Robotics Team 5190 | 2017 - 2019

Mentored an award winning FRC team of over 70 students on programming, electrical engineering, mechanical engineering, graphic design, and marketing. *Kotlin, Java, LABVIEW, Python, SOLIDWORKS, Autodesk Inventor, ASP, DSP, cRIO, Adobe Creative Cloud, Inkscape, GIMP*

Work Experience

Software Engineer and Analyst | Aquisense Technologies | 2018 - 2021

Designed custom Ultraviolet research tools and equipment on a cross-functional team. While leading development of numerous products, I worked with over 30 universities and 40 companies including NASA JPL, KBR, Boeing, Mitsubishi, etc. Built cloud hosted version control systems for software, electrical, and mechanical teams. Migrated millions of SQL entries of customer and product data to a database and visualized this data on Grafana. Built numerous automation systems, ran data analysis, and programmed embedded devices. • *Python, C#, Objective-C, Atmel, COMSOL, SOLIDWORKS, Altium Designer, PostgreSQL, Grafana, PLC, AWS, DSP, ASP*

Graphic Designer and Social Media Marketer | University of North Carolina at Charlotte | 2017-2018

Designed official UNC Charlotte graphics and maintained University social media web pages. • *Adobe Suite, GIMP, Inkscape, HTML, CSS*

Projects

Robot Control System | 2019

Path planning, PID control, autonomous, and intelligent robot programming. • *ROS, Python, DSP, ASP*

Client-Server Chat App | 2020

Programmed TCP over UDP for learning purposes and wrote an asynchronous client-server chat app. • *Wireshark, Python*

LabJack Wrapper | 2018

Designed a custom wrapper for LabJack devices which brings high level arduino-like functions to the device. • *Python, ASP, DSP*

Honeypot Android App | Duke University Hackathon | 2019

Led a team of three software engineers to make an application built with a decentralized blockchain over bluetooth to create a message board that works without the internet. • *Android Studio, Firebase, Kotlin, Java, iOS, Swift, Bluetooth, BLE*

Computer Vision Projects | 2019

Achieved the top 1% of scores on each assigned CV class project: Application scraper, eye-tracker, fourier domain processing, and an image classifier using an SVM. • *MATLAB, Julia, Python, OpenGL, scikit-learn, numpy, pandas*

PearlPlotter | 2019

Designed and built physical automation devices that measure the intensity of light produced on an XY plane. Programmed a GUI to control the device settings and view data in real time. Integrated calculator and MS Word manual generator where the user can input raw sensor values, calibration curves, and light spectrums to create adjusted intensity plots, averages, and custom values. • *C#, .NET, Windows Forms, Excel, Word, PowerQuery, Python*