Nathaniel M. Rose

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Accomplished and motivated developer interested in advancing computational systems and building solutions that enable all people.

Education:

Syracuse University

L.C. Smith College of Engineering and Computer Science

Bachelor of Science; May 2014 Major: Computer Engineering

Minor: Information Technology, Design and Startups

Skills:

Development Skills: Languages: C, C++, C# Java, JavaScript, XAML, Python, Logic, x86 Assembly, VHDL, SQL, PHP, R

Frameworks: .NET 4.5+ 4.6, YARP, NACHOS, Motorola Freescale, AllJoyn, Jekyll **Web Dev:** HTML5, XML, Signal R, ASP.NET, Node.JS, Angular JS, Bootstrap, MEAN Stack

Cloud: IaaS, PaaS, SaaS, Azure, IoT Hubs, Nitrogen.IO, LAMP Stack, DevOps, ML, DevOps, Docker,

Kubernates, RabbitMQ, Data Wrangling, Microservices, Azure Service Fabric

Software: MultiSim, JGrasp , Maple 15, Finale, Pro Tools 9, Adobe Photoshop, Adobe Dreamweaver, MS

Sharepoint, ISpace, Dashworks, MiK TeX, Fruity Loops, Serato, Robo Lab, Android Studio

Other: iCUB, Building/ Customizing CPUs, PC Threat Security, Tech Excel, Digital Circuitry, EEG Headsets, Kinect, Muse, Public Speaking, Event Planning, 12 Years Music Experience, Steaks

Professional Work Experience:

07/17-Present **Microsoft Corp.**

San Francisco, CA

SDE II

- Commercial Software Developer for partnered Microsoft cloud enterprise customers.
- Focused on high scale data, containerization, cloud orchestration and data wrangling.
- Still figuring out my new position, check back in with me later!

07/14-06/17 **Microsoft Corp.**

Technical Evangelist

San Francisco, CA

- Certified Microsoft Azure Solutions Architect (MCSD): License 11730319
- Architected IaaS/PaaS solutions in Microsoft Azure allowing net new companies and startups to expand cloud capabilities
- Worked with SF developer community in building projects that further the IoT, NeuroTech, and Data Science fields

07/13-08/13 Italian Institute of Technology

Genoa, IT

iCUB Summer School Participant

- Introduced to basic A.I. and robotic engineering fundamentals including motor control, and neural networks
- Designed over 1200 lines of code using C++ that was used to study humanoid predictive rewards and functionality
- Studied emerging research in robotics such as visual recognition pipelines, tactile servoing, optimization and more

06/12-09/12 **JP Morgan Chase & Co.**

Jersey City, NJ

Global Corporate Technology Infrastructure Intern

- Aided in the distribution of the Windows 7 operating system for 250,000 worldwide machines
- Used multiple skills to improve WebPages that displayed the progress of the distribution using HTML and XML
- Created training course curriculums using SCORM Conformant Content for team members

09/10-08/11 **Le Moyne College**

Syracuse, NY

Information and Technology Consultant

- Learned to troubleshoot Laptops and Desktops for a College Campus of 5,000 students
- Repaired laptops, and tablets using Virus Remediation and System recovery and Re-Imaging
- Handled campus networking issues remotely on a Datatel system and Oracle database

Project Work:

A.I. Predictive Reward Research (2014-Present)

• In this study, the team will model the production and inhibition of dopamine signals used in the human brain to train an artificial neural network programmed into a humanoid robot. My contributions to this project will be the creation of a 2-class decision tree model that simulates dopamine receptors when a task is accomplished by the humanoid machine.

Kinect-Kannon (2014)

• The Kinect Kannon is a semi-autonomous robotic T-Shirt launcher that is augmented by Kinect for Windows. It fires by opening a valve releasing approximately 100 PSI of Carbon Dioxide.

Troll Bridge (2015)

• Troll Bridge is an authentication Token service built for Microsoft Azure and IoT Devices. The service uses a Database to map authorized devices to Azure cloud service credentials and signatures.

Project Eureka: Golf-Sense (2015-Present)

• In this project, our team uses the Muse EEG Headset to stream user brain wave data into an ML trained API that generates a brain state golfing probability. The user putts, records their drains and the application returns a probability of their next drain based on current alpha neural signal

Memberships and Organizations:

• NeuroTechx SF

• TealsK12

• Collegiate Science & Technology Entry Program (CSTEP)

• Institute of Electrical and Electronic Engineers (IEEE)

• National Society of Black Engineers (NSBE)

• Syracuse University Rugby Football Club

• TEDx Syracuse University Planning Committee

Member **2015**

Volunteer Computer Science Teacher 2015

Alum **2011** Member **2011**

President Emeritus 2013

Alum **2011**

Founder 2013

Awards and Distinctions:

• Collegiate Science & Technology Entry Program Scholar Recipient

• Louise Stokes Alliance for Minorities Program Scholar Recipient

• National Society of Black Engineers BCA Scholarship

• National Action Council for Minorities in Engineering Scholarship

May 2014 May 2014

March 2014

December 2013







