

My name is **Maneesh Sud**. Greetings.

You can reach me at [ManeeshSud@protonmail.com](mailto:ManeeshSud@protonmail.com) and [msudx2000@gmail.com](mailto:msudx2000@gmail.com).

Understand that I am an atheist and that I believe not in one God but many scientists trying to explain our experiences, commonality and differences. We all experience and *focus* on different things but we eat, breathe, drink and bathe in water and are composed of carbon on this planet we call **Earth**. Maybe the best explanation of our *existence* is that we are farmed by aliens.

I seek opportunities to develop and test commercial products for a company that supports open source software development. My education includes computer science, mathematics and electronics. With professional experience in developing compilers and electronic assembly automation.

Advancements in computer languages and quantum computing are enabling artificial intelligence capable of passing the 'Turing Test'. Soon special labels on milk, meat, produce and medication will identify, date and tamper proof the products we consume. Scientists have even printed a heart with reprogrammed stem cells. *I however do not believe in animal testing. I too was a medical test subject and still am.*

**With a passion for computers and robots it is my belief that engineers can accomplish anything with science including transforming not only consumer products but also our belief in what is possible. Free software, open standards, well documented extensible file formats, and open source licenses challenge us to look past wealth accumulation. I hope that before the end of this century money will no longer be as important. Citing Bill Gates (Donkey Basic).**

YouTube channels from Germany clearly demonstrate that all consumer products can be printed on demand. Stanford University has robots that can assemble, package and deliver the products directly to consumers. 3D printing and robotics continue to reduce the costs of all consumer products. Toys, clothing and advertisements can now be printed using organic inks.

Please accept my resume for the following job titles: ***Embedded Linux Engineer, Software Engineer, QA Engineer, Application Developer, Webmaster, Web Developer, System Programmer and System Administrator.***

It is with these organic inks that I wish to **target: mobile RISC5 SoC, flash and USB devices *operating on battery power on ISM bands***. Starting with a motherboard for a smartwatch.

## Introduction

I am sentient, intelligent and capable of computing arithmetic, probabilities, uncertainty and discriminates. Matrices arranged as rows and columns of logic, vector and polynomial equations are organized as bits, bytes and words in machine representation. Ranking and then sorting outcomes are fundamental to AI planning when there's not one but many accepting states in space-time search of trie data structures.

I have the aptitude, experience and expert knowledge in system and network programming, electronic circuit design, material science, IoT (Internet of Things) Single Board Computers (SBC) and serial peripherals such as modems and Intel's USB. Libraries and class interfaces for Machine Learning (ML), Vision Systems (VS), Digital Signal Processing (DSP), Software Defined Radio (SDR) are implemented as frameworks and software components accessible in High Level Languages (HLL).

The Unix philosophy emphasizes building simple, short, clear, modular, and extensible code that can be easily maintained and repurposed by developers other than its creators. The Unix philosophy favors composability as opposed to monolithic design.

As a linux developer, system administrator and user of [text/image/language] manipulation tools I can build the next operating system for mobile computing and communication for battery operated devices talking to one another with light and radio waves.

## Education

*NetMax Technologies SCO 198-200, Sector 34 A, Chandigarh, 160034 (2007-2008).*

Electronic Design Automation: DC/AC circuit simulation and Printed Circuit Board (PCB) design. Linux, Embedded ARM, and (mixed /) Digital Signal Processing (DSP). Favorite operational amplifier circuit is the integrator. I am a certified Embedded Linux developer.

*Low Price Edition textbooks, Indian subcontinent (1995, 2003-2008).*

Pearson Education, McGraw Hill, Prentice Hall, Cambridge Press. Artificial Intelligence: Structures and Strategies for Complex Problem Solving, George Luger. The Art of Electronics; Compilers: Principles, Techniques, and Tools; Data Structures and Algorithms in C. TCP/IP Illustrated, Volume 1-3. The C++ Programming Language. Design Patterns: Elements of Reusable Object-Oriented Software. Linux administration user manuals. Wireless Communications and Networks, William Stalling. C: The Complete Reference, C++: The Complete Reference, Java: The Complete Reference.

*Microsoft Developers Network Silicon Valley, MSDN Online Subscription, (1998-2000).*

Application development with Microsoft Foundation Classes. The course included: Object-Oriented Programming, Design Patterns, User Interfaces and Computer Graphics (DirectX). MS Assembler and Visual Basic, Visual C++ 1.52 4.0 6.0. Created a portfolio with computer games, a search engine and web-server.

*Bookstores and Libraries, Portland, OR and California (all over CA) (1995, 2003-2008).*

Tower Book, Border Books, Powell Books, Amazon, Barnes and Nobles. Most notably Perl Programming, Perl Reference and Bison Manual. Nanoelectronics : Principles and Devices.

*San Juan Unified School District 3738 Walnut Ave, Carmichael, CA 95608 (Class of 2000).*

60 credits in mathematics: Algebra 1 & 2, Geometry, Trigonometry, Calculus. Metal technology was a good starting point for Computer Aided Drafting (CAD). Favorite metals are silver, copper and iron. These are excellent conductors.

*Napa State Hospital (Program 5) 2100 Napa Vallejo Hwy, Napa, CA 94558 (2009, 2012-2013).*

Cognitive/Dialectical Behavior Therapy (CBT/DBT) and other mental health groups. Competency restoration: court procedure, sentencing guidelines and legal precedence research. Score on the Competency Assessment Test (CAT) was 46/50. I am a psychiatric mental patient that has been the recipient of police brutality and indifference and psychiatrists that tortured me with psychological warfare only to be interrupted by brain surgery and prolonged suffering in institutions and correctional facilities.

## **Work Experience**

*Intel Corporation 2200 Mission College Blvd, Santa Clara, CA 95052 (2000).*

Quality Assurance Engineer: I received training as a Microsoft Windows and Linux system administrator. Maintained Bash, Korn, Perl scripts to test Intel Optimizing Compilers. Shell scripts compare and track test cases and bugs between different versions of Intel's and their competitors' products. There was already a software system to accept jobs, track them to completion, and generate reports. I wrote two utilities for Intel and a device driver to load disk images from network file servers onto IA32 and IA64 machines at boot time using Intel PXE. The boot loader supported Microsoft Windows and LILO 'Linux loader'. Features included menu navigation, fonts and a debugger. I signed a non-disclosure agreement (2000). I read some of the documentation for the Intel 64 bit RISC architecture while employed at Intel.

*Free Software Foundation 51 Franklin Street, Fifth Floor, Boston, MA 02110.*

Numerous open source contributions to Debian and Ubuntu software repositories. I have released several video games under the General Public License (GPL) and continue to use free software. I compel others to use computers responsibly. Hackers are those that value freedom and are self taught. The freedom to share ideas and information. Free books and software are essential. I wish books had been free in print.

*Advanced Consultants Inc. 5255 Stevens Creek Blvd, Santa Clara, CA 95051 (2001).*

President: Developed an operating system similar to Windows CE. My prototype had a window system and an interpreter. The timing of my first release was months after the stock market crash and immediately after 9/11. With no job opportunities or funds I became destitute. I was referred to shelters and mental health hospitals.

## **References:**

I have not been gainfully employed in much time. I have been homeless and in institutions with no way to climb out. I am finally aware that I need a birth certificate and that Intel may have named their USB interface after me but did not include me. SanDisk may be a similar story. I contributed nothing and all my code is lost except what I have stored in my neural net. I do have Nikola Tesla this X-mas. Please read about coupons for food and watches for foster children and retarded people (msi).

## TUTORIAL Sensor Project: [Borg: "Resistance is futile."]

### PC interface for sensor ;-)

In 7 steps you build and test an interface to connect a sensor (var. resistance) to a PC.

Made this project in about a week with software: Electronic Workbench and Turbo C. The Radio Shack will not sell you everything you need. The bill of materials is about \$20.

1. obtaining Computer Aided Drafting (CAD) and Computer Aided Manufacturing (CAM) software.
2. finding a schematic I could re-purpose to interface a sensor (*resistor*) to the printer port on a PC compatible.  
Ans. digital oscillator centered around an Application-Specific Integrated Circuit (ASIC) called a '555'.
3. schematic entry, circuit simulation and (optional) exporting to an industrial file format to print a circuit board.
4. designing and building our sensor project hardware:
  - A. buying the parts at the Radio Shack. Books and websites are also helpful and often provide clues.
  - B. assembling and soldering main circuit.
  - C. patching a printer cable.
  - D. improvising a case for our PC interface.
5. writing a MS-DOS utility: [this is called an *algorithm or pseudo code*].  
The following is a program listing:
  - A. change the video mode; draw both the 'x' and 'y' axis and label them; initialize local variables and bins.
  - B. reading a sample or measurement: read and poll 'LPT1 status register' until one complete pulse is received.
    1. polling the appropriate status register and extracting the busy bit.
    2. use this busy bit, hopefully the same as the logic level as the busy pin.
      - A. waiting and counting the clock in a loop for a pulse transition of the busy bit from 1 to 0.
      - B. waiting and counting in a loop for the next transition of the busy bit back to 1.
  - C. normalize measurements (proportional to the counter).
  - D. plot a pixel; move plotter or cursor; check graph boundaries if "out of bounds" proceed to label A.
  - E. if the escape key has not been pressed (loop condition) then move on to the next sample 'goto' to label B.

End of Program
6. instrument calibration through experimentation until good results are achieved.
  - A. this is done by tracing or stepping in a program listing with a utility called a debugger.
  - B. replacing electronic components until the pulse timing is within range.
  - C. trimming two resistors or the capacitor used to program the 555 general purpose timer.
7. connect a test circuit with a sensor and watch the computer plot a graph of resistance.

Notes: Watch a video tutorial on YouTube. Search for proper soldering technique for THT. Also search for 'how to patch a printer cable.' Write a computer program in a programming language. Try different types of sensors. CAD software enables you to capture and simulate circuits.

Basic tools needed are wire cutters, wire strippers and a soldering station. Learn to read circuit diagrams called schematics and how to identify parts before soldering.

This document clearly demonstrates my abilities to code and document well structured programs.

My technical writing and text manipulation abilities are truly inspired by the IBM PC and UNIX world.

Thanks to book retailers and authors like Peter Norton I can be truly inspired to create the future.

I was a privileged teenage hacker that was placed in foster care. I was denied food and acceptance by adults and peers. Racism, ethnicity and religion are something the police enforce. I am a thief and google and intel wants me to pay. I have lost my innocence and collect federal disability benefits. I am terminal. Dial-up and logon.