

David Alderoty Resume

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Summary of the Services I Offer

I have a Bachelor of science degree, with a GPA of 3.95, and I create software-based calculation devices. This includes online JavaScript calculators, and specialized spreadsheets, and databases created with Microsoft Excel. I am skilled in technical writing, and I can write instructions for the JavaScript, and spreadsheet devices I create. You can contact me by phone (212) 581 3740, E mail David@TechForText.com, or by clicking on this link, for a website communication form. You can download a printable version of my resume in a Microsoft Word document, or in a PDF format, by left clicking on the blue underlined words.

The services listed in this document, I can provide on a limited contract basis, or in terms of long-term employment. I have my own equipment, and software, and I could work onsite or offsite.

Topic 1) Computer Science and Mathematics for Creating Software Based Calculation Devices

I create software-based calculation devices, which are useful for businesses, and educational institutions. This includes specialized spreadsheets, databases with calculation mechanisms, online calculation devices, and various types of web-based timing devices. The online or web-based devices, I create are independent computer programs, based on JavaScript, and they function over the Internet, or directly from a computer, in conventional web browsers.

I can create the calculation devices mentioned above to meet the specifications of technical personnel, mathematicians, and managers. This can involve calculation devices for business mathematics, statistics, algebra, trigonometry, hyperbolic functions, calculus, and date and time computations. I can also create tutorials, with calculation mechanisms, such as for arithmetic, algebra, trigonometry, and calculus.

When I create a calculation device, I usually program in all of the mathematical steps (or operations) directly into the software. With this design strategy, I can create calculation devices that can carry out extremely complex mathematics, as soon as the user enters numbers and clicks with the mouse. These devices can be designed to carry out multiple calculations simultaneously, with one set of related numbers entered by the user. Because I program in all of the steps, individuals without mathematical training, can use the calculation devices I create, if they know which numbers to enter.

I also create website communication forms, based on HTML and JavaScript. If you want to see a simple website communication form that I created, left click on these words. After left clicking, a form will be displayed, for sending a text message, which can be over 500 words. I can create these devices with date and time displays, and/or with built-in calculation mechanisms, such as to calculate the total cost of a number of products.

I have studied technical writing extensively in college, and I can write instructions for the software and spreadsheets I create.

In topic 5 there is a list of 27 Web links to access software-based calculation devices that I created. This includes databases with calculation mechanisms, and specialized spreadsheets, created with Microsoft Excel, as well as online JavaScript calculation devices.

Topic 2) Educational Services I can Provide, Involving Computer Science and Mathematics for Creating Software Based Calculation Devices

I developed many skills and techniques for creating software-based calculation devices, and I would like to teach these techniques to others. Specifically, I can provide instructional services, at a college or graduate school level for creating software-based calculation devices, for various types of mathematics including: arithmetic, business mathematics, statistics, algebra, trigonometry, hyperbolic functions, calculus, and date and time computations. This can involve all of the following:

- How to create calculation devices based on Microsoft Excel, OpenOffice Calc, and JavaScript for online functionality
- How to create website communication forms based on JavaScript
- How to create websites for online JavaScript devices
- How to create specialized spreadsheets, and databases with calculation mechanisms, with Microsoft Excel
- How to create all of the above, with advanced date and time functionality

Topic 3) Education Related to the Services I Offer

I graduated in the spring of 2013, with a **Bachelor's degree in Science, Mathematics, and Technology**, with a **DOUBLE MAJOR** and grade point average of **3.95**, from the State University of New York, Empire State College.

The services I offer relate directly to the majors, which are presented below:

1) Computer Science and Mathematics for Creating Software-Based Calculation Devices

2) Technical Writing and Computer Technology

3) I also have an Associate Degree from Empire State, with a major in Computer Technology and Problem Solving.

NOTE: Empire State College uses the term concentration, for the word major, on official transcripts.

Ongoing Graduate Studies

I expect to obtain a Master's degree in Expository & Technical Writing, at the end of the fall semester of 2016, from the graduate program at Burlington College.

Topic 4) A list of Web Links to Access Calculation Devices I Created

NOTE: Below there are 27 URLs to access some of the software-based devices I created. Most of these devices perform mathematical calculations. However, a few of these devices carry out other types of computations, such as for time and date.

Some of these devices are on websites that start with an article, or instructions. In such a case, scroll down until you see the calculation device. In addition, most of the calculation devices have numbers in their input boxes. When this is the case, delete the numbers, and then enter your own numbers. Before entering or deleting a number in a calculation device, left click on the relevant input box.

After entering numbers, you can obtain a calculated result by left clicking with the mouse anywhere on the calculation device, except for an input box. Some devices have a calculation button that you can use as an alternative to the above.

1) www.TechForText.com/Sphere (This device functions online) The Radius-Sphere Calculator, calculates the volume and surface area of a sphere simultaneously, when the length of the radius is entered. This software displays very large and very small-calculated results, in scientific notation.

2) www.Tech-For-Text.com/M1 (This device functions online) The Exponential-Calculator is a JavaScript device that can calculate numbers raised to any power. This includes exponents that are negative, positive, or in decimals, such as 2.4, 6, 0.5, -2, -3, -0.4. When the calculated results are very large, or very small, the Exponential-Calculator displays the results in scientific notation.

3) www.Tech-For-Text.com/M2 (This device functions online) Integral Calculus-Calculator is software that solves a simple integral online. This software displays very large and very small-calculated results in scientific notation.

4) www.TechForText.com/PolyTrig-Calculator (This device functions online) The PolyTrig Calculator carries out over 30 trigonometric calculations simultaneously, as soon as the user enters the height, and length of the base, of a right triangle, and clicks with the mouse.

5) www.Tech-For-text.com/M4 (This device functions online) The Division Calculator is for dividing one number by another. The numbers entered by the user are displayed as a fraction, and the calculated results are displayed in numbers and decimals. This software displays very large and very small-calculated results in scientific notation.

6) www.TechForText.com/General-Area-Equation (This device functions online) The website title is the General Area Equation And a Related Online Calculation Device. The device on this website calculates the area of rectangles, triangles, and circles, simultaneously, as soon as the user enters two numbers, and clicks with the mouse. This software displays very large and very small-calculated results in scientific notation.

7) www.TechForText.com/General-Volume-Equation (This device functions online.) The website title is the General Volume Equation And a Related Online Calculation Device. This device calculates the volume of a cube, sphere, and pyramid, if the user enters the same number in three input boxes. If the user enters numbers that are not the same in the input boxes, this device calculates the volume of a cuboid, ellipsoid, and a pyramid. This software displays very large and very small-calculated results in scientific notation.

8) www.Tech-For-Text.com/M5 (This device functions online) The Physics Calculator for Molecular Speed is a JavaScript calculation device that calculate

simultaneously the Root Mean Square Speed, Average Speed, and the Most Probable Speed of gas molecules, at a specific Kelvin temperature.

The calculations are based on an ideal gas. However, on the lower section of the calculator, there is an input box to enter a constant for a real gas. When this is done, the lower section of the calculator will display the results for the real gas.

Because the calculated results are based on Kelvin temperature, this website has an additional calculator on the bottom of the webpage, to convert Fahrenheit temperature to Kelvin. The calculator also converts centigrade to Kelvin.

9) www.TechForText.com/IntegralCalculusGenerator (This device functions online) The device on this website is titled: Basic Integral Calculus Generator, and it is designed to help students practice calculus. When the user enters two numbers in its input boxes, this software generates 12 calculus problems that involve integrals. The student can check his or her manual calculation, by deleting the letter N in an input box. When this is done, the computer displays the correct calculated result.

10) www.TechForText.com/Double-Integral-Calculus-Generator (This device functions online) The Double-Integral-Calculus-Generator is similar to the above, except it generates calculus problems that involve double integrals.

12) www.TechForText.com/Hyperbolic-Functions (This device functions online) This website is titled: An Online Calculation Device For Hyperbolic Functions, And Related Mathematical Concepts. The website contains software that calculates the hyperbolic sine, cosine, tangent, cotangent, secant, and cosecant, as soon as the user enters a number in a input box, and clicks with the mouse.

13) www.TechForText.com/Algebraic-Calculator-For-3-Unknowns (This device functions online) The Algebraic-Calculator-For-3-Unknowns solves three equations simultaneously, online, for X, Y, and Z. The equations must be in the form of: $AX+BY+KZ=M$, $DX+EY+FZ=N$, and $GX+HY+JZ=W$.

14) www.TechForText.com/Correlation-Calculator (This device functions online) This website contains an Online Correlation Calculator. This device calculates the correlation coefficient, of two sets of numbers. The calculated results are displayed in the conventional style, as well as in an unconventional format based on percentage. A perfect correlation would be 100%, instead of 1, with the unconventional display.

15) www.TechForText.com/AveragingCalculatorAndDatabase This website provides two calculation devices, which are the Averaging Calculator, which is an online JavaScript calculation device. The Averaging Database is available in the Microsoft Excel format, which can be obtained by downloading.

16) www.TechForText.com/Calculating-Spreadsheet-Databases This website is titled: Calculating-Spreadsheet-Databases Created with Microsoft Excel. The website provides 20 databases, with various types of calculation mechanisms, which were created with Microsoft Excel. The databases do not contain data, and they are designed for users who want to enter and store their own data.

17) www.TechForText.com/Calculating-Databases This website is titled: Databases with Calculation Devices. The website has twelve blank databases, created with Microsoft Excel, which you can use to store and organize your data. The databases require both Microsoft Windows and Microsoft Excel, with the exception of three of the devices that are available in JavaScript for online functionality. All of the databases have some type of calculation mechanism, such as to calculate: money, averages, correlations, count the number of items entered in the database, etc.

18) www.Tech-For-Text.com/Budget1 This website provides the Online Budget-Rate Calculator, which calculates, total income and expenses, balance, RATE of income and expenses, and RATE of financial gain or loss.

19) www.TechForText.com/Interest/Interest/Interest.htm (This device functions online) This is a Compound Interest Calculator. To use this calculator delete the numbers in the four input boxes, and then enter your own numbers.

20) www.David100.com/M6 (This device functions online) The Shopper's-Calculator is useful for checking the accuracy of grocery receipts, and to determine how much an item will cost if you have a coupon reduction, and/or sales tax.

21) www.Tech-For-Text.com/Budget/Addition/Addition.htm This is a simple online calculation device for adding the cost of a list of items.

22) www.TechForText.com/Using-One-Symbol-to-Represent-a-Set-in-Programming (This device functions online) This website is titled: Using-One-Symbol-to-Represent-a-Set in Programming. The software on this website was designed to demonstrate a very simple concept that relates to computing, as well as language. Specifically, a symbol, or word, or phrase, can be used to represent many words, actions, or lines of computer code. This device uses three symbols, which are A, B, and C. The user can determine the meaning of the symbols, by entering words in an input box.

23) www.TechForText.com/RELATIVITY-of-Meaning-of-Symbols-and-Signals-in-Computing-Devices (This device functions online) This website is titled: The RELATIVITY of the Meaning of Symbols and Signals,... The software on this website demonstrates that the meaning of a symbol can be determined by the interpretation mechanism. The words red, blue and green, are interpreted three ways, with three interpretation mechanisms, in this software. There is a different version of the above software that transmits the symbols automatically from one input box, to three interpretation mechanisms simultaneously. See www.TechForText.com/Computing-Devices-Relativity-of-Meaning

24) www.TechForText.com/Decision (This device functions online) This device is titled: Decision Channeling Calculator, and it was created solely for experimental

and demonstrational purposes. When an even number is entered, this device automatically transmits it through a green pathway, to over 30 small calculation devices on the right side of the webpage. When the user enters a number that is not even, it is automatically transmitted through yellow pathway, to over 30 small calculation devices, on the left side of the webpage.

25) [www.TechForText.com/Experimental-Elapsed-Timers/1\)-Multi-Units.htm](http://www.TechForText.com/Experimental-Elapsed-Timers/1)-Multi-Units.htm) (This device functions online) The title of this device is Experimental Elapsed Timer for Multiple Units, and it was created solely for experimental and demonstrational purposes. This is an elapsed timer, which measures and displays time, with all of the following units: days, hours, minutes, seconds, deciseconds, centiseconds, milliseconds, microseconds, shakes, nanoseconds, picoseconds, femtoseconds, and attoseconds. This device can also be used as a countdown timer.

26) www.TechForText.com/3000 (This device functions online) The title of this website is: Counting Down to the YEAR 3000, with the Experimental Countdown Timer for Multiple Units. The lower section of this website has a timing device that was created for experimental and demonstrational purposes. This device is similar to the timing device described above, except it is set to countdown from the present date, to Wednesday, January 1, 3000, 12:00 AM. The countdown is displayed in days, hours, minutes, seconds, deciseconds, centiseconds, milliseconds, microseconds, shakes (100 millionth of a second), Nanoseconds (1 billionth of the second). The following units are displayed in scientific notation, because of the large number of decimal places: Picoseconds (1 trillionth of a second), Femtoseconds (1 quadrillionth of a second), Attoseconds (1 quintillionth of a second).

27) www.TechForText.com/Timing-Devices-Created-with-Spreadsheet-Software This website is titled: Timing-Devices-Created-with-Spreadsheet-Software. This is essentially a short e-book that explains various aspects about formulas and format code that relate to the time and date functionality in Microsoft Excel. The concepts explained in the book are at a very advanced level, and they are

demonstrated with functioning online software-based timing devices. The timing devices are embedded directly in the webpage, and are accompanied by text explaining related concepts. These timing devices are also available by download in the Microsoft Excel format.

Topic 5) Information About Me

I am very self-disciplined, and I have no difficulty working on long and complex projects. I can work effectively by myself or as part of a team. I get along well with people, especially with individuals with diverse backgrounds and experiences. I enjoy being helpful, and I respect the individuality, feelings and needs of others. I enjoy teaching individuals and small groups, but I also enjoy learning from others.

When I learn something new, or face a challenging problem, it usually stimulates a sequence in my mind of questions, hypothetical concepts, possible experiments, and creative ideas. I enjoy problem solving and goal attainment efforts that involve business, management, and human behavior. I enjoy conquering technological, mathematical, and scientific challenges. I have been interested in the physical and social sciences, and experimentation since childhood. This interest helped me do well in my college studies, which resulted in a grade point average of 3.95.

I maintain excellent health habits. I eat with the goal of optimizing my nutrition, and I am fussy about what I consume. I never smoke cigarettes or consumed alcoholic beverages. I exercise for at least 30 minutes a day. I do a variety of exercises for endurance, strength, and flexibility.

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