



## Senior Bioinformatic Applications Scientist/Software Developer (6541BR)

### About Us

Life Technologies Corporation (LIFE) is a global biotechnology tools company dedicated to improving the human condition. The company was created from the merger of Invitrogen Corporation and Applied Biosystems in November of 2008.

Life Technologies customers do their work across the biological spectrum, working to advance personalized medicine, regenerative science, molecular diagnostics, agricultural and environmental research, and 21st century forensics. LIFE's systems, consumables and services enable researchers to accelerate scientific exploration, driving to discoveries and developments that make life even better.

With annual sales in excess of \$3 billion, LIFE employs approximately 9,000 people in more than 100 countries and possesses a rapidly growing intellectual property estate of approximately 3,600 patents and exclusive licenses.

Life Technologies is a publicly traded company trading on the NASDAQ under the symbol LIFE. For more information on how we are making a difference please visit Life Technologies on the web.

### Position Summary

We are seeking candidates with a background and experience in bioinformatics software technologies and products design, development and support for molecular biology, genomics and synthetic biology. The candidate will employ expertise in bioinformatics, data analysis, biological insight, and software engineering to bring an engineering perspective to the practice of molecular biology, in order to promote the newly developing field of synthetic biology. The ability to communicate with customers, lead and manage projects, design, test, document, and communicate results to diverse audiences are important aspects of this role. Successful candidates will be working in our Carlsbad headquarters within the company's synthetic biology business unit, interacting with other scientists and engineers from a wide variety of backgrounds in Asia, the United States and Europe.

### Education Requirements

Doctorate degree in Bioinformatics, Life Sciences, Mathematics, Systems Biology, Chemical Engineering, Fermentation or a related engineering or scientific discipline with:

- A minimum of 3 years of relevant post-graduate and/or industrial experience
- Relevant experience in biological analysis or wet bench experience
- Bioinformatics or Biology candidates with experience in synthetic biology, metabolic engineering or systems biology, especially in the area of pathway design and simulation and/or higher order metabolic engineering are strongly preferred; Experience with next generation sequencing analysis is an advantage; Experience with metagenomic and "omics" data analysis and modeling strongly preferred. Prior experience with flux based metabolism analysis, and associated softwares, database and algorithms an advantage.

[\(Please see back for additional requirements.\)](#)

**and/or**

- Mathematics candidates should have experience in constraint-based modeling and simulation as applied to biological systems. Experience with application of machine based methodologies to analyze and characterize novel experimental methodologies along with combining several such tools together to optimize combinations of such solutions preferred. Experience in algorithm development for next generation sequencing analysis, devising visualization methodologies for complex types of data, graph based analyses such as petri nets as applied to biological data or other relevant experience is sought.

**and/or**

- Chemical Engineering and Fermentation candidates should have experience in chemical and biochemical manipulation and production of metabolites and/or strain development. Previous experience with bacterial, algal, plant, fungal or archaeobacterial production systems strongly preferred. Ideally we are looking for individuals interested in using biochemical approaches to complex chemical synthesis problems and guiding the development of the strains necessary to implement these synthesis projects. Experience with using metagenomics to identify novel enzymes for synthesis bottlenecks, application of directed evolution of both proteins and bacterial strains are of interest.

**and/or**

- Software Engineering candidates should have experience in computer software design for desktop, web and cloud-based software architectures. Experience with two or more of the following: C/C++ and Java based cross platform development frameworks and design; architectural development of novel and legacy softwares; development and application of Ontologies and semantic web technologies into tools; visualization of complex data and GUI design best practices; and experience with development of applications for scientific software or automation/LIMS preferred.

### **Additional Experience and Requirements**

- Algorithm and database development and refinement
- Collaboration development with research community
- Demonstrated balance of creativity and record of productivity in a dynamic work environment
- Develop bioinformatics related sales tools such as application notes and white papers
- Develop training plans, support materials and assist in the development of technical documentation
- Interact with, document guide software development and V&V engineers in developing tools and solutions
- Participate in publishing and presenting novel bioinformatics results in scientific journals
- Participate in validation and verification of software products
- Provide timely technical and application assistance in response to customer inquiries
- Use of softwares for solutions based development and support of novel products
- Work closely with our scientists to identify and design new software and products to meet the needs of users of synthetic biology products and workflows

**~~ Please apply to position 6541BR online and be sure to include an updated version of your resume. ~~**

**Life Technologies is an equal opportunity employer committed to hiring a diverse workforce.**

**[www.lifetechnologies.com/careers](http://www.lifetechnologies.com/careers)**

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