

Dear Hiring Committee,

I am interested in the internship position for Summer 2013 as Software Engineer which I found on Google web site. In my eyes, Google is a great company with a rich portfolio of high quality services. I would be grateful to have a chance to be part of it.

I have degree from Computer Science specialized in programming with strong mathematical background. I have broad set of technical skills that are required for such a position. I am able to navigate in large code-bases and write clean, self-documented code. Working as a part of a talented team is a great opportunity and comes naturally to me. I would love to contribute to projects that will have a world-wide impact.

Currently I am pursuing my master's degree at Purdue University and am employed as a Research Assistant. Our research project is about usage of graph grammars to represent a road network of cities. This involves implementing algorithms in C++ for encoding and decoding graphs as grammar with respect to geometry information. One of the challenges of this project is efficient usage of many famous graph algorithms, such as sub-graph isomorphism or largest clique finding, which are NP-complete algorithms.

As work toward my Bachelor's degree, I built relatively complex web service for generating L-systems. This project enhanced my skills in a great way because it involved implementing wide range of features such as parser and compiler for L-system language, modular extensible library for generating L-systems, modern web interface and database for storing non-trivial relationships between generated L-systems. For distinguished work in high school, I created a music sheet recognition program. Input is image of music sheet and output is MIDI file which can be played by any player. The biggest challenge of completing this project was recognition of notes because, unlike characters, not all of them can be recognized statistically by matching them against a database. I won a prestigious prize for this project, and its ceremony was broadcasted on national television.

I have been programming since I was 12 years old. My first program was console snake written in Borland C running in MS DOS. I still can remember that beep sound when snake ate an apple. After few years of PHP and Java, I transitioned C# which is now my favorite language. At college, I discovered the beauty of functional languages such as Haskell or F# and I started to use some techniques of functional programming in other languages. During the last few years, I have been programming mainly in C++. Programming is my passion, and the best reward for me is when somebody appreciates my work.

I am confident that I am able to offer the skills you are seeking for this position. Please consider this cover letter and the included documents for an interview. Thank you for your time, and I am looking forward to hearing from you.

Sincerely,  
Marek Fiser