

# F# and GPGPU

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## ABSTRACT

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## CCS Concepts

•Software and its engineering → Automated static analysis; Software maintenance tools; •Theory of computation → *Program analysis; Parsing;*

## Keywords

GPGPU, OpenCL, F#, metaprogramming, !!!!!

## 1. INTRODUCTION

GPGPU is popular technique for....  
Tools are low level  
Complex problems, geterogenous platforms.  
F# primitives  
General requiremnts: highlevel language, existing code/dll-  
s/other stuff reusing  
Brahma.FSharp – the best platform for !!!!

## 2. F# PROGRAMMING LANGUAGE

### 2.1 Code quotation

### 2.2 Type providers

### 2.3 Async MBP etc

## 3. RELATED WORK

### 3.1 FSCL

### 3.2 Alea CUDA

### 3.3 Managed Cuda etc

## 4. BRAHMA.FSHARP

### 4.1 Architecture

### 4.2 ?????

### 4.3 OpenCL type provider

## 5. EVALUATION

## 6. CONCLUSION

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