Tyler Marklyn

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EDUCATION

MAY 2015 Harvey Mudd College, Claremont CA

Joint Major in Computer Science and Math, Concentration in Linguistics

Dean's List, Final GPA: 3.62/4.00

JUNE 2011 The Northwest School, Seattle, WA | Final GPA: 3.96/4.00

WORK EXPERIENCE

MARCH 2019-PRESENT

Software Engineer 2 at MICROSOFT

Transition within the Whiteboard team at Microsoft to focus on development of a web-based implementation of the Intentional Programming Platform, with the eventual goal of creating an open-source application development framework.

Currently, lead team that works closely with application developers using the framework to improve and refine our published APIs and Features to be more ergonomic, allowing for faster development of high-impact applications.

MAY 2017-MARCH 2019

Software Engineer 2 at MICROSOFT

Continued work on the Intentional Layout Engine after Microsoft acquisition. Special focus on improving performance of the layout engine as we shipped Microsoft Whiteboard for Surface Hub, Desktop, and Mobile. Expand the Layout API to better support multithreaded and deferred work across rendering frames.

AUG 2015-MAY 2017

Software Developer & Analyst at Intentional Software

Worked primarily on implementation of an incremental-computation based layout engine. The engine allows application developers on the Intentional Programming platform to use our Layout DSL to create performant applications that can automatically performantly update visuals.

Worked on API to allow application developers to extend the Layout Engine with their own custom visuals and animations, while still automatically providing incremental computation.

MAY 2014-AUG 2014

Software Engineering Intern at Intentional Software

Worked on a number of projects including: creation of a color picker widget, modification of the ticket system, and leading a team of interns on a massive widget refactor.

SEP 2012-MAY 2015

Computer Science Grader/Tutor at HARVEY MUDD COLLEGE

Grader/Tutor for a number of courses, including: Data Structures and Program Development, Computer Systems, Computability and Logic, and Programming Languages.

TECHNICAL SKILLS

Basic Knowledge: JAVASCRIPT, ERLANG, SCHEME, UNIX, Mathematica, C, HASKELL, MATLAB

Intermediate Knowledge: TypeScript, C#, C++, Python, Java, Excel, LATEX

Practice in: Incremental Computation, Computation Platform Creation & API Design, Distributed Sys-

tems, Programming Language Design, Data Structures

NATURAL LANGUAGES

ENGLISH: Fluent ITALIAN: Fluent Spanish: Fully able to converse French: Basic Knowledge

INTERESTS AND ACTIVITIES

TECHNICAL: Incremental Computation, Data Visualization, Data Structures, Distributed Algorithms, Domain Specific Languages, Programming Language Creation

Non-Technical: Board Games, Video Games, Linguistics of natural languages and their relation to programming languages, Competitive Magic: the Gathering, Baseball, Football, Juggling, Any Seattle-based sports team