Maxwell Levatich

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Education

Columbia University *PhD in Computer Science* *Sept 2020 – Present*

- **Thesis (proposed):** "C++ Program Partitioning for Information-Flow Control"
- Advised by: Stephen A. Edwards

Yale University *BS and MS in Computer Science* *Sept 2016 – May 2020*

- GPA: 3.67
- **Coursework:** Software Verification, Compilers, The Hardware/Software Interface

Teaching

Software Engineer *Cupertino, CA*
Apple *June 2005 – Aug 2007*

- Reduced time to render user buddy lists by 75% by implementing a prediction algorithm
- Integrated iChat with Spotlight Search by creating a tool to extract metadata from saved chat transcripts and provide metadata to a system-wide search database
- Redesigned chat file format and implemented backward compatibility for search

Software Engineer Intern *Redmond, WA*
Microsoft *June 2003 – Aug 2003*

- Designed a UI for the VS open file switcher (Ctrl-Tab) and extended it to tool windows
- Created a service to provide gradient across VS and VS add-ins, optimizing its performance via caching
- Built an app to compute the similarity of all methods in a codebase, reducing the time from $\mathcal{O}(n^2)$ to $\mathcal{O}(n \log n)$
- Created a test case generation tool that creates random XML docs from XML Schema
- Automated the extraction and processing of large datasets from legacy systems using SQL and Perl scripts

Journal and Conference Publications

3D Finite Element Analysis of No-Insulation Coils Jan 2004
Frodo Baggins, ***John Doe***, Samwise Gamgee
10.1109/TASC.2023.3340648

Awards and Certifications

3D Finite Element Analysis of No-Insulation Coils Jan 2004
Frodo Baggins, ***John Doe***, Samwise Gamgee
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Service

3D Finite Element Analysis of No-Insulation Coils Jan 2004
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Industry

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Software Projects

Multi-User Drawing Tool *github.com/name/repo*

- Developed an electronic classroom where multiple users can simultaneously view and draw on a "chalkboard" with each person's edits synchronized
- Tools Used: C++, MFC

Synchronized Desktop Calendar *github.com/name/repo*

- Developed a desktop calendar with globally shared and synchronized calendars, allowing users to schedule meetings with other users
- Tools Used: C#, .NET, SQL, XML

Custom Operating System *2002*

- Built a UNIX-style OS with a scheduler, file system, text editor, and calculator
- Tools Used: C