Keshav Anand — Brag Sheet

Program Information

Application for Research and Science Institute (RSI), and ultra-selective (3%) program at MiT for science research

Admission into this program results in auto-admission into **practically any US College** (due to selectivity)

I am applying for RSI so I can promote my computer science and engineering research that I have done

- RSI Program Page — top program in the US for high school research
- I am applying in computer science and robotics as research disciplines
- My acceptance is dependent on my prior research, accolades, and the strength of my recomendations

Character Traits and Personality

- **Honest** and high **integrity**: helped catch cheaters in school multiple times.
- **Inquisitive and Curious**: always asking questions and trying to learn more
- **Hardworking and Determined**: Pushing myself to perfection in everything I do
- **Creative Problem Solver**: Able to think outside the box and come up with innovative solutions
- **Character Weaknesses:**

  Can tend to overthink problems and overcomplicated solutions

  Sometimes take on too much at once and struggle to prioritize tasks

  Sometimes struggle with delegation and asking for help when needed

  Can be overly critical of myself and others at times

Education

University of Pennsylvania *Sept 2000 – May 2005*
BS in Computer Science

- GPA: 3.9/4.0 (a link to somewhere)
- **Coursework:** Computer Architecture, Comparison of Learning Algorithms, Computational Theory

Experience

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

Publications

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

Frodo Baggins, ***John Doe***, Samwise Gamgee

10.1109/TASC.2023.3340648

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

Technologies

Languages: C++, C, Java, Objective-C, C#, SQL, JavaScript

Technologies: .NET, Microsoft SQL Server, XCode, Interface Builder