Timothy O'Brien

119 Quillen Ct. #1213 – Stanford, CA 94305

Education

Stanford University

Stanford, California

MA/MST, Masters of Music Science and Technology

2012-Current

Two year masters program at the *Center for Computer Research in Music and Acoustics*. Studies include computer music composition, human-computer interaction design, and digital signal processing. Research focuses on complex system simulation for computer improvisation an real-time generative algorithmic composition. (Current GPA: 4.3)

University of Virginia

Charlottesville, Virginia

BS, Physics

2002-2006

Distinguished major in physics, concentration in computational physics, and minor in anthropology. Studies included C/C++ programming for analysis and simulation of physical systems. Senior thesis examining the dynamics of shear transformation zones in amorphous solids via numerical simulation. Dean's List: Spring 2003, Fall 2003, Spring 2004, Spring 2005.

Work Experience

J.P. Morgan Chase

New York, New York

Equity Research Assistant

Nov. 2006-Aug. 2012

- Assisted three Executive Directors, one Vice President, and three Associates who covered real estate investment trusts (REITs), brokers, asset managers, and exchanges.
- Updated, published, and distributed weekly valuation comparison databases for the aforementioned sectors.
- Compiled various data for research publications.
- Acted as the first point of contact for clients and company management of all levels, including CEOs and CFOs.
- o Managed the team's logistical needs (including coordinating corporate access events and industry conferences).

Technology Consultant

Sep. 2006-Nov. 2006

- Facilitated the consolidation of all J.P. Morgan Equity Research Analysts' contact lists into a global database system using Microsoft Access and Excel and utilizing knowledge of SQL and Visual Basic.
- Liaised with analysts and database architects to ensure a smooth rollout of the contact management product.

Musical Experience

Bandleader

New York, New York

suiGeneris, Limehead

Summers 2003-2005, 2006-2012

Composed, performed, and recorded original musical works as leader of a progressive, alternative metal group at numerous venues throughout New York City. U.S. finalist in the international Emergenza battle of the bands competition. Selected venues: Webster Hall, The Bitter End, Fat Baby, Don Hill's, CBGB.

Guitarist

New York, New York

Um, Who's RVZ?

2010-2011

Lead guitarist for Brooklyn and Manhattan-based indie rock band *Um*; sole guitarist for *Who's RVZ?*, performing deep cuts from Van Halen, Led Zeppelin, and The Who at venues in Manhattan and Queens, New York.

Skills

Programming: Python, C, C++, Processing, Arduino

DSP: SuperCollider, PureData, ChucK, Matlab, Octave, JACK

Systems: Linux, Bash, Emacs, Vim, Git, Shell Scripting **Applications**: GIMP, Frescobaldi, Audacity, Ardour

Web Technologies: HTML, CSS

Standardized Testing

GRE General Test: Sep. 8, 2011

- 170 Verbal (99th percentile)
- o 168 Quantitative (96th percentile)
- 4.5 Analytical Writing (72nd percentile)