Nick DiRienzo

nvdirienzo@gmail.com | (973) 985 - 6199 | http://nickdirienzo.com

Education

University at Buffalo, The State University of New York (May 2015)
B.Sc., Computer Science; University Honors College Scholar; Provost Scholarship Recipient

Publications

1. Geoffrey Challen, Jerry Antony Ajay, **Nick DiRienzo,** Oliver Kennedy, Anudipa Maiti, Anandatirtha Nandugudi, Sriram Shantharam, Jinghao Shi, Guru Prasad Srinivasa, Lukasz Ziarek. `maybe` We Should Enable More Uncertain Mobile App Programming. In Proceedings of *ACM HotMobile 2015: 16th Workshop on Hot Topics in Mobile Computing Systems and Applications*. Santa Fe, NM, 2015.
2. **Nick DiRienzo** and Geoffrey Challen. Controlling Smartphone User Privacy via Objective-driven Context Mocking. In Proceedings of *EAI MobiCASE 2014: 6th International Conference on Mobile Computing, Applications and Services*, Austin, TX, 2014.
3. **Nick DiRienzo** and Geoffrey Challen. Should Smartphone Users Mock Apps? In Proceedings of *6th ACM HotPlanet Workshop*, Philadelphia, PA, 2014.
4. **Nick DiRienzo**, Gino Buzzelli, and Geoffrey Challen. Smartphone Users Want to Be Mocked (poster). In Poster and Demos Session of *ACM HotMobile 2014 Workshop: 15th International Workshop on Mobile Computing Systems and Applications*, Santa Barbara, CA, 2014. (**Winner of Best Poster Award**)

Research Experience

University at Buffalo PhoneLab REU: Undergraduate Researcher (Nov 2013 – Present)

- PocketMocker (Nov 2013 – Nov 2014):A system allowing Android users to mock sensor data by using an app that interfaces with custom Android platform modifications.
    - Led prototype development by understanding and modifying the Android platform.
    - Measured energy overhead for record and replay processes using a Monsoon Power Monitor.
    - Conducted 10 user studies to collect qualitative feedback.
    - Evaluated the functionality of the PocketMocker system.
- Progresso (Oct 2014 – Present): A system to determine in-app user wait times by measuring UI components such as progress bars.
    - Leading project timeline, development, evaluations, and demonstrations.
    - Mentoring a secondary undergraduate researcher to assist in project development.

Industry Experience

Optimizely: Software Engineering Intern (May 2014 – Aug 2014)

- Designed and developed a queue-based syncing system for account usage.
- Led discussions with designers and marketers to design an updated subscription cancellation flow, and engineered multiple prototypes throughout the process.
- Designed and developed an Android app allowing customers to view experiment, variation and results data.

Google: Software Engineering Intern (May 2013 – Aug 2013)

- Analyzed binary to find unnecessary dependencies and refactored code to reduce a 6GB deployment by 500MB.
- Refactored and redesigned an email alerting platform to identify differences in BigTable datastores.
- Designed and developed a system to determine whether two RPC services function equivalently using a generic Protocol Buffer framework.

Google: Software Engineering Intern (Jun 2012 – Aug 2012)

- Prototyped a system to automate setup and teardown of a hermetic environment intended for debugging and integration testing.

Selected Personal Projects

Forest Fire (HackPrinceton Fall 2013, Nov 2013)

- Reverse-engineered popular dating app Tinder to determine who likes you before you like them—essentially, breaking the entire premise of the app. **Top 40 Finalists out of 80 teams.**
- Developed a machine learning model to auto-like or -dislike people using computer vision.
- Developed with three other undergraduates in 24 hours.

PlaceAR (PennApps Spring 2013, Jan 2013)

- Simple augmented reality Android app to overlay location-based information.
- Developed with three other undergraduates in 36 hours.

GridTime (Startup Weekend Buffalo, Nov 2012)

- Grid computing utilizing Android smartphones as nodes. **Awarded 2nd place out of 30 teams.**
- Developed prototype and minimal business plan with two other undergraduates in 54 hours.

Other open source projects at *www.github.com/nickdirienzo*.

Leadership, Service & Involvement

SUNY Buffalo CSE Department (Aug 2014 – Present)

- CSE 115 Undergraduate TA: Led 3 recitations of up to 30 students each; taught fundamental Java concepts.

UB Hacking (Jan 2012 – Present) [ubhacking.com]

- Founder & Director (Jan 2012 – May 2014): Led organizational team to bring a 24 hour hackathon to SUNY Buffalo; 50, 110 and 75 hackers participated over three years by raising $2000, $8500 and $6000 from 15+ corporate sponsors.
- Sponsorship Director & Director Mentor (May 2014 – Nov 2014): Led sponsorship outreach to raise over $15000 from 10 corporate sponsors. Mentored new Director with planning a 36-hour hackathon.

Association for Computing Machinery (Oct 2011 – Present)

- Chair (May 2012 - May 2014): Founded weekly Tech Talk series; brought engineers to campus to discuss the problems being solved at their companies. Founded weekly hack nights; brought 20+ students together to work on side projects and assignments, while learning from their peers.
- Vice Chair (Jan 2012 - May 2012): Founded UB Hacking (described above).

Awards & Grants

IEEE MASS Travel Grant Winner (Oct 2014)

Awarded to selected student authors to assist in travel funding to IEEE MASS 2014.

UB Engineering Alumni Association "Leaders in Excellence" Scholarship (Apr 2014)

Awarded to three students with outstanding leadership in the field of engineering and the community.

Best Poster Award (Feb 2014)

Award winner of 19 other posters at ACM HotMobile 2014 in Santa Barbara, CA.

UB Creative Undergraduate Research and Creative Activity Grant (Feb 2014)

Awarded to limited undergraduates for funding meaningful research.

McLernon Engineering Scholarship (Apr 2013)

Awarded to selected engineering undergraduates with outstanding student leadership, involvement in extracurricular activities, and community service.

2nd Place at StartupWeekend Buffalo (Nov 2012)

2nd place winner at a 54 hour business competition.

UB Creative Undergraduate Research and Creative Activity Grant (Feb 2012)

Awarded to limited undergraduates for funding meaningful research.