Joseph Howard

Newton, MA 02466
(617) 866-0837
joehoward.dev@gmail.com, **joehoward.dev**

SENIOR SOFTWARE ENGINEER & COMPUTATIONAL PHYSICIST

Lead Engineer • Engineering Manager • Data Analyst • Senior Application Developer

High Performance Computing • Big Data • Data Science • Mobile/Backend Development

Effective Mentor/Recruiter/Instructor • Shipped New Products • Improved Processes

Experience

JULY 2017 - PRESENT

Razeware, McGaheysville, VA – *Director–Article Team*

Leading education provider for the mobile and web community, raywenderlich.com.

- Increased size of Android article team from 10 to over 80 people.
- Achieved a greater than 2X increase in company recurring revenue within a 2 year period.
- Expanded domain teams from 3 to 5.
- Streamlined course development process to focus on courses for advanced developers.
- Contributed to over 600 tutorial content items in 3 years.
- Delivered over 20 video courses for beginner and advanced developers.
- Produced over 50 edits for tutorial articles.
- Expanded Android book coverage from 1 book to 8 books.
- Accelerated iOS team growth by 33% to support iOS book development teams.
- Delivered Final Pass Edits for 3 mobile development books.

FEBRUARY 2014 - JULY 2017

Raizlabs/Rightpoint, Boston, MA – *Android Platform Lead/Lead Engineer*

Digital experience creator driven by strategy, design, and technology.

- Increased Android developer team size from 2 to 10.
- Delivered custom Android ROM for nationwide fitness company.
- Expanded company-wide use of Scrum/Agile methodologies.
- Achieved 4.5 star rating for native e-commerce app for a national electronics retailer.
- Contributed real-time directions component to national amusement park app.
- Produced an iOS A/B test framework utilizing the Objective-C runtime.

MAY 2011 - FEBRUARY 2014

SapientNitro, Boston, MA – *Manager–Mobile Solutions/Senior Mobile Developer*

Business strategy and marketing company that fuses customer experience and engineering.

- Introduced app for 7000 device pilot program deployed to 1000 retail stores.
- Streamlined mutual fund wholesaler sales process for financial services provider.

- Improved financial services provider software development process using Agile methods.
- Delivered gift registry component in national retail app.

NOVEMBER 2005 - MAY 2011

Raytheon Technologies, Woburn, MA – *Principal Systems Engineer*

Aerospace and defense innovator with technologies that push the limits of science and engineering.

- Orchestrated system participation in 5 $100M Missile Defense Agency flight tests and distributed ground tests.
- Provided system-level expert knowledge as customer-certified Responsible Engineer.
- Integrated 2 application software upgrades to main system mission software.
- Trained AFSPC operators and maintainers on system software, usage, and procedures.
- Generated 6 test mission plans for forward-based X-band radar.

Education

SEPTEMBER 2000 - MAY 2006

Boston University, Boston, MA – *PhD Physics,* 3.92/4 overall GPA.

- Dissertation: "Lattice QCD Simulation with the Overlap Dirac Operator," a particle physics simulation of the overlap Dirac operator in quenched lattice Quantum Chromodynamics (QCD), including large-scale Fortran parallel computation and subsequent data analysis and prediction of quenched QCD parameters.
- Awarded Certificate in Computational Science, Advanced Computation in Engineering and Science (ACES) Program, Integrative Graduate Education and Research Traineeship (IGERT) National Science Foundation Fellowship, and Dean Fellowship.

SEPTEMBER 1994 - SEPTEMBER 1995

Brandeis University, Waltham, MA – *MA Physics*, 3.90/4 overall GPA.

- Awarded 1994 Fisher Scholarship.

SEPTEMBER 1990 - MAY 1994

Hofstra University, Hempstead, NY – *BS Physics and BS Mathematics*, 4.0/4 overall GPA.

- Outstanding Senior Scholar (Valedictorian) Award, class of 1994.
- Graduated with Highest Honors, Physics and Highest Honors, Mathematics.

Technologies

Working Knowledge: Kotlin/Android SDK, Python, shell scripting, numerical methods, UNIX/Linux.
Previous: Swift/iOS SDK, C/C++, Java, Fortran, Matlab, Mathematica, STK, MPI, SQL, HTML/CSS/JS, backend development.
Methodologies: Agile, Scrum, Kanban, Test Driven Development, DevOps.