

Declan Murphy

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|-------------------|--|-------------------------|
| OBJECTIVE | A software engineer specialising in C and Java development, with an interest in spaceflight technologies. | |
| EDUCATION | <i>Master of Science</i> , High Performance Computing Trinity College, Dublin. Concentration: Parallel Computing and Code Optimization Minor: Computational Fluid Dynamics | Sept. 2013 - Sept. 2014 |
| | <i>Bachelor of Arts</i> , Theoretical Physics Trinity College, Dublin. Concentration: Mathematics Minor: Physics | Sept. 2009 - May 2013 |
| | <i>Junior Certificate & Leaving Certificate</i> Gonzaga College SJ, Dublin. | Sept. 2003 - June 2009 |
| PROJECTS | <i>FlightClub</i> - www.flightclub.io | 2014-2016 |
| | FlightClub is a “full stack” simulator for visualising rocket launches and landings. <ul style="list-style-type: none">• Real-world physics simulations, including supersonic retropropulsion• Automated and optimized landing algorithms• Real-time 3D mission visualisation tracking multiple stages• RESTful API• Front end built initially on jQuery, currently AngularJS and Angular Material• MySQL Database design• Featured in multiple articles online, including 'Popular Mechanics' | |
| EXPERIENCE | <i>Systems Engineer</i> CarTrawler, Dublin | 2015-2016 |
| | <ul style="list-style-type: none">• Building and maintaining in-house software utilised by the entire business• Working with all departments to discuss their business needs and how their work can be enhanced by technology• Personal project management• Large responsibility and workload with several overlapping workstreams as I am currently the only person on the team | |
| | <i>Junior Software Engineer</i> CarTrawler, Dublin | 2014-2015 |
| | <ul style="list-style-type: none">• Building software applications, following coding standards, building appropriate unit tests, integration tests and deployment scripts• Responsible for projects from design phase through deployment• Taking part in creative discussions and steering those discussions in the most technically appropriate direction, recommending the best technical approach• Coping with multiple, often overlapping work streams | |

Teaching Assistant 2010-2014
Trinity College, Dublin

- Providing private and group tutoring to Engineering, Mathematics and Physics students at Undergraduate level
- Providing private tutoring to Mathematics and Physics students at Leaving Certificate level

Sales Assistant 2009-2013
Spar Ballybrack

- Providing customer service, sales and advice, and maintaining good relationships with clients and suppliers
- Responsibility for cash registers, floats and end-of-day transactions, maintaining shop floor and display

SKILLS & AWARDS

Languages, Software & Operating Systems:

Fluency: Java, REST framework, SQL Server, C, MPI, OpenMP, L^AT_EX, jQuery, Ubuntu, Windows

Proficiency: AngularJS, Angular Material, PHP, CSS, C++, JSON, XML

Experience: OpenGL, SDL, Python, MATLAB

Skills:

Parallel Computing, Scientific Computing, Numerical Analysis

Awards:

Foundation Scholarship for academic excellence in Theoretical Physics from Trinity College, Dublin, 2012

Centre for Talented Youth, Ireland, Dublin City University:

Completed a computer programming course at the age of 7 and a Mathematics course at the age of 8, the youngest student in both classes

Other:

Unique problem solving skills

Excellent logical thinking

Application of the scientific method and physical framework to practical scenarios

Strong inter-personal skills

MISC

Moderator of SpaceX forum on reddit.com 2015-2016

Captain of Tagliatelli Tag Rugby team 2014-2015

Completed Hell and Back 2013

Captained Gonzaga Panthers Rugby team 2007-2009

Leinster Schools Junior Cup Finalist 2006

Winner of Elsie Rowley Golf Memorial 2005

REFEREES

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