Peter Armstrong

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http://peterarmstrong.ie
http://github.com/peteretep

Education

- **University College Cork** — Cork, Ireland
  Marine Renewable Energy (MEngSc) — *Sept. 2015 – Sept. 2016*
    - Key Courses: Wind Energy (81%), Ocean Energy (74%), Sustainable Energy (77%), Environmental Impact Assessment (74%), Offshore Exploration (59%), Tidal Energy (65%), Marine Renewable Energy (82%), Mechanical Systems (75%), Computational Fluid Dynamics (60%), Solar Energy (66%), Coastal Engineering (83%)

- **Dublin City University** — Dublin, Ireland
  Graduate Diploma in Information Technology; Credit — *Sept. 2011 – May 2012*
    - Key Courses: Object Orientated Programming, Information Systems, Networking and Operating Systems, Database Design, Web Design

- **National University of Ireland - Galway** — Galway, Ireland
  Bachelor of Engineering (Mechanical); Second Class Honours, First Grade — *Sept. 2003 – June 2007*
    - Key Courses: Finite Element Analysis, Polymers and Composites, Mechanical Engineering Design, Fluid Dynamics, Thermodynamics, Engineering Computing

Engineering Projects

Stability of Vessel for Launch and Recovery of Tidal Energy Device: I am currently working on my Masters project regarding the stability of operations and maintenance vessels.

CFD Analysis of a Tidal Turbine Blade: I modelled a section of a tidal turbine blade using ANSYS Fluent. I compared the results with results obtained from Blade Element Momentum analysis.

Measure Correlate Predict for weather data: I wrote a simple python script to analyse weather data as part of a wind energy assignment. I focused on clarity of code and documentation of methods when writing this script. The code is available on Github.

CFD Analysis of Microfluidic Mixing Devices: I studied the microfluidics of mixing devices using computational fluid dynamics (CFD). This involved modelling a number of designs using 3D CAD software and using the ANSYS CFX software package to analyse the behaviour of fluids flowing through them. This was my final year project for my Bachelor of Mechanical Engineering.

Experience

- **Minesto** — Portaferry, Northern Ireland
  Masters Placement — *May 2016 – Current*
    - Placed with tidal energy company in their R&D site for Masters project

- **OnePageCRM** — Galway, Ireland
  Web Application Developer — *Feb. 2014 – Sept. 2015*
    - Developed new features and improvements to the OnePageCRM web application using Ruby on Rails, MongoDB
    - Maintained the public API and working with the mobile team on new API features
    - Automated and maintained testing with RSpec using Agile & Continuous Integration methodologies
    - Maintained the Developer portal and communicating with integration partners
    - Maintained and improving the large legacy codebase
    - Agile project management, including leading the weekly team retrospective meeting
    - Regular support responsibilities, both to technical and non technical customers
    - Writing for the developer blog at developer.onepagecrm.com/blog

- **VisualID**   Dublin, Ireland
  Web Application Developer   *June 2012 – Feb. 2014*
  - Worked in the small DevOps team to support and improve the Visual ID Digital Asset Management application
  - Managed production and development servers - CentOS, OSX and Ubuntu. This includes co-located, private cloud (Xen Virtualisation) and public cloud (Rackspace) servers
  - Assess customer requests and add features to the development schedule
  - Supported the customer services team with worldwide clients. This includes back end database queries, scripting and researching communication tools
  - Identified the need to standardise the application front end to reduce developer workload and undertook a front end redesign
  - Organised monthly software release and deployment cadence
  - Championed a company wide move to modern project management and source code management tools. This improved the issue tracking and project management workflow and dramatically improved communication within the company

- **Self Employed**   Sligo, Ireland
  Tourism Businesses   *Sept. 2007 – Sept 2011*
  - Opened the top ranked hostel in Sligo with two partners before selling my share
  - Opened and ran the second largest kitesurfing centre in Ireland, LSD Kiteboarding
  - Opened and ran a sailing school, Rosses Point Sailing

- **Mullaghmore Sailing Club**   Sligo, Ireland
  Activity and Maintenance Manager   *June 2010 – August 2011*
  - Maintained a fleet of boats and set up new preventative maintenance measures
  - Completed boat repairs using fibreglass, epoxy and wood
  - Managed a team of 15+ staff, supervising 40+ students per week
  - Ran training to upskill staff and dealt with any disciplinary issues
  - Revised operating procedures to improve compliance with teaching and safety standards

Skills

Programming Languages: Ruby, Javascript, Coffeescript, Python, PHP, Java, Lasso. Also some experience with Fortran and C during my Bachelor of Engineering

Tools and Operating Systems: Linux (Ubuntu, CentOS), Virtualization (VirtualBox, Xen, Vagrant), Apache web servers, Git, Subversion

Web Development: HTML/CSS, jQuery, ReactJS, Ruby on Rails

Databases: MongoDB, MySQL

Web Applications: Jira, Bitbucket, Github, Wordpress, Drupal, Codeship

Engineering Software: AutoCAD, Autodesk Inventor, Solidworks, ANSYS Fluent / CFX, Maxsurf, ArcGIS

Office Software: LibreOffice, Latex, Google Apps

Interests and Volunteering

Volunteer Lifeboat: I volunteered as a crew member with Sligo Bay RNLI lifeboat for two years. I attended weekly training and was on call 24/7

Watersports: Strong interest in sailing, kitesurfing, kayaking, sea swimming

Boat building: Wooden boat building - I built a racing dinghy using plywood and composites and competed in a world championships. Member of Sligo Men's Shed boatbuilding group

Programming Mentoring: I volunteered as a coach with Rails Girls Galway, teaching a group of novice programmers the basics of web development

Sea Scouts: Leader with 3rd Sligo Sea Scouts and managed a boat building project with them