Peter Armstrong

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

Experience

- **KPS Energy (Kite Power Systems)** — Glasgow, Scotland
  Broad scope Engineer working across software and mechanical departments — Feb. 2017 – Current
  - Joined KPS as a Software Engineer based with the Flight Operations team in Stranraer
  - Qualified internally as backup Flight Test Director
  - Simplified flight test operations to reduce the need for a software engineer and moved to Flight Sciences team in Glasgow office
  - Worked on the legacy flight control and simulation system in the Scala programming language
  - Worked on a number of software projects, including hardware/software integration, integration of autopilot and simulation environments
  - Took lead on the hardware integration, assembly and initial testing of a newly designed device
  - Liaised with academic partner and travelled to German university to supervise flight testing

- **Beaufort Research, UCC** — Cork, Ireland
  Research Assistant - LEANWIND — Sept. 2016 – Feb. 2017
  - Worked on the LEANWIND Offshore Wind project
  - Continued development of legacy financial modelling tool in MATLAB and Excel

- **OnePageCRM** — Galway, Ireland
  Web Application Developer — Feb. 2014 – Sept. 2015
  - Worked with the team to develop new features and improvements to the product
  - Agile project management, including leading the weekly team retrospective meeting
  - Regular support responsibilities, both to technical and non technical customers around the world
  - Implemented and maintained automated testing
  - Improved communication with industry partners
  - Wrote for the technical blog at developer.onepagecrm.com/blog

- **VisualID** — Dublin, Ireland
  Web Application Developer — June 2012 – Feb. 2014
  - Worked in the small team to support and improve the Visual ID web application
  - Championed a company wide move to modern project management tools. This improved the project management workflow and dramatically improved communication within the company
  - Managed production and development servers - on call 24/7
  - Assessed customer requests and added features to the development schedule
  - Supported the customer services team with clients worldwide
  - Standardised the application to improve the product and reduce developer workload

- **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

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: My Masters project regarded the stability of operations and maintenance vessels for a tidal energy device.

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: For this project 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.

Skills

General IT Skills: Strong IT skills (Linux focused) with an ability to quickly lean new software packages. Experienced with LibreOffice, Atlassian Jira/Confluence, Latex, Google Apps.

Computer Programming: Experience with many different programming languages, including Python, Ruby, MATLAB and web development languages. Also familiar with C++ and PLC programming.

Engineering Software: Familiar with engineering software including AutoCAD, Autodesk Inventor, Solidworks, ANSYS Fluent / CFX, ArcGIS.

Data Analysis: Experience with databases and data analysis tools.

Interests and Volunteering

Community Band: Play Tenor Sax with Brass, Aye? - a Glasgow based brass band.

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.

Adventure Sports: Strong interest in sailing, kitesurfing, kayaking, sea swimming, rock climbing.

Wooden Boat building: I have built canoes and sailing dinghies using plywood and composites.