# Seamus Woods

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#### **WORK EXPERIENCE**

# **Demonstrator in Systems Programming**

Trinity College Dublin

09/2019 - Present

Dublin, Ireland

#### Achievements/Tasks

- Demonstrator for CSU22014 Systems Programming. A module in which second year students of Computer Science learn the C programming language and the UNIX operating system.
- Tasks include helping students out with problems they have with their assignments during the lab.

#### **Software Engineer / Cyber Security Intern** Hewlett Packard Enterprise

06/2019 – 08/2019 (3 Months) Galway, Ireland

#### Achievements/Tasks

- Summer internship working on two projects and gaining exposure to a cyber security environment.
- The first project was to develop an application through Vue.js to improve the automation of lab remediation within the company, more details below.
- The second project was building a SOF-ELK stack for analysis and long term storage of log files for the advanced threat response team.
- Shadowed cyber security analysts in the cyber defense center.

### **Software Engineer Intern** UnitedHealth Group - Optum

06/2018 – 08/2018 (3 Months) Dublin, Ireland

#### Achievements/Tasks

- Summer internship working on a project which was run through an Agile Environment
- Tasked with creating an application that general practitioners could use to easily navigate the Human Phenotype Ontology and label patients more accurately. (Detailed description of project below)
- Participated in several workshops (e.g.) A11y(Accessibility) and UX.

#### **GROUP PROJECTS**

Visit the portfolio section of my website for more details about the following projects and others.

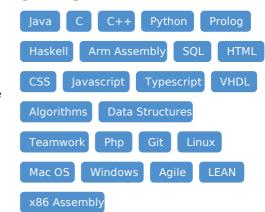
Genomics Labeling tool (Optum) (06/2018 - 08/2018)

- Optum Project run through Agile environment Team of 3.
- We created an application through Angular with the goal of navigating the Human Phenotype Ontology and to help increase the accuracy of labeling patients.
- The Human Phenotype Ontology (HPO) is a standardised vocabulary of phenotypic abnormalities containing over 13,000 term.
- The final application was a product of collaboration between the team I was a part of (navigation of HPO), another team in the office (integration of machine learning model to recommend HPO terms based on ICD codes) and an intern team in the US (integration of graph based database of patients)
- The application improved speed and accuracy of labeling patients.

#### Lab Remediation Automation (HPE) (06/2019 - 08/2019)

- HPE project Team of 2.
- Given a collection of Python scripts which run periodically to produce a list of labs which weren't compliant with the company.
- Tasked with improving the scripts and building a frontend to display metrics from the scripts.
- Optimised the scripts from a run time of ~8 hours to under 5 minutes.
- Created a clear and concise frontend to display metrics and send emails to managers of employees whose labs weren't compliant.

#### **SKILLS**



#### **EDUCATION**

Trinity College Dublin - Integrated Computer Science (09/2016 - Present)

#### Fourth Year (09/2019 - Present)

Machine Learning / Computer Vision / Advanced Computational Linguistics / Fuzzy Logic & Control Systems / Human Factors / Entrepreneurship & High Tech Venture Creation

#### Third Year (Grade: I)

Symbolic Programming / Software Engineering / Computer Architecture II / Compiler Design I / Intro. to Functional Programming / Information Management II / Computational Mathematics / Software Engineering Group Project / Concurrent Systems I / Statistical Methods for Computer Science / Advanced Telecommunications / Artificial Intelligence

#### Second Year (Grade: II.I)

Algorithms + Data Structures / Programming Project II / Systems Programming I / Concurrent Systems + Operating Systems / Microprocessor Systems / Computer Architecture / Telecommunications II / Information Management I / Discrete Mathematics

#### First Year (Grade: I)

Mathematics / Intro. to Programming / Programming Project I / Intro. to Computing I + II / Electrotechnology / Digital Logic Design / Telecommunications I / Computers + Society

I (70%+) / II.I (60-69%) / II.II (50-59%) / In progress

## **ACHIEVEMENTS**

Trinity Employability Award (in partnership with Intel) (10/2018)

Including several workshops such as 'Model Based Problem Solving' and 'LEAN' both in Intel.

#### Graphics Cup (05/2016)

Secondary School End of Year Awards - Awarded for top performance in the school for the subject Design and Communication Graphics.(Technical Drawing & CAD)

#### INTERESTS

