Andrew Novac

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Education

University of Toronto
Sept. 2014 to Dec. 2019

- Honours Bachelors of Science: Computer Science Specialist | Mathematics Minor
- Focused studies on Artificial Intelligences, Machine Learning, and Neural Networks
- Coursework in: Software Development; Operating Systems; Databases; Algorithms; Applications of Computer Science; Programming Languages; Computer Architecture; Programming organization; Web Programming; Mathematical Modelling; Robotics

Employment

Cast Software
Jan. 2020 to Current

Software Developer

· Integrated a real-time tracking protocol with unreal engine to parse data from beacons, implementing all functionality provided by RTTrP exposed by blueprints for user scaling and optimization

· Decreased smoothing latency in BlackTrax by 20% through FIFO discarding of data and the implementation of a switch style system to optimize delivery of packet info, as well as taking advantage of in-engine interpolation instead of velocity and acceleration measurements

· Took on revitalization project of the customer outreach system by migrating to ZenDesk and implementing natural language processing to decrease user time spent, response time of marketing and sales, and number of tickets opened

Cast Software
May 2018 to Aug. 2019

Research Developer Intern

· Restricted Resource.h content IDs by 90%, then set up a greedy algorithm to go through viable program paths and log actions taken by identifying changes through OpenCV and numpy

· Using a RasPi and a USB hub, allowed on-site representatives to always have the latest images and documentation in a set of SSDs - ready and constantly updating though a local TCP exchange

· Tracked user information using Revulytics and logged information onto a csv file, allowing identification of critical application areas and possible user combinations

Projects

Melodify
A fully fledged windows application using the Spotify API, replacing the native client with a cleaner version with algorithmic stats

Robotic Motions
Using a real or simulated 7-R robotic arm, identify end-effector position and perform route planning in a dynamic environment

Facial Recognition
Using machine learning methods, linear regression and gradient descent, created a visual program that follows faces in videos

Emergency Response Aid
Android application that sends user health and location information to contact emergency services, using OAuth and API Medic

Technologies

C · C# · C++ · Java · React · Python · MongoDB · Javascript · and more...

Experiences

Version Control: git and svn control systems

Agile Ceremonies: stand up, scrum, waterfall, and more

Volunteer Note-taker: helped the Accessibility centre at UofT

International Baccalaureate: two-year high school education program