**Advantages/Disadvantages**

● Make impacts on society ● Spending too much time at computer screen cause eye

● Can create virtually any- strain

thing that comes to mind ● Long hours of sitting causes

● Can be self-employed back related problems

● The salary is good, selling ● Staying too long in typing

software also makes money position causes wrist injuries

**Tasks**

* **Design and develop up-to-date software for computers and mobile devices**
* **Create new algorithms to help the software be executed in the computer**
* **Produce flowcharts, diagrams and documentations to explain the software its’ uses, how it will be designed etc.**
* **Help identify problems in businesses and sometimes even engineering and science**
* **Write programs in C++ and Java**

**Salary**

* On average, about $85,000
* Ranges from $50,000 to over $130,000
* Software makers sell self-created software for sometimes millions of dollars
* Benefits include health care, disability and pension funds

**Licenses/Certifications/Examinations**

\*Are not mandatory but recommended by employers

* ICCP (**Institute for Certification of Computing Professionals)- by exam**
* **CCP (Certified Computing Professional)- by exam**
* **Training and certification by the SME institution- by exam**
* **Training and certification by the ACM Society- by professional experience**

**Harrington O’Shea Survey**

* Found in the scientific job/career area
* Scored a 28 in the scientific job/career area
* Subjects I like: Math, Science, Art and Technology
* Work values I have: independence, working with mind, setting/accomplishing high achievements and prestige
* Abilities I have/important: mathematical, scientific, computational, spatial, artistic, and mechanical

**Education & Training**

\*Preferred by employers

* **Liberal arts degree**

***or***

* **Bachelor’s degree in computer science, information systems, engineering or physics**

*or*

* Master’s degree in **computer science, information systems, engineering or physics**

*and*

* **Training/Knowledge of HTML, Visual Basics, Java, or C++ with Windows**

**Future Outlook/Competitiveness**

* Future outlook is excellent
* Predicted to be one of the fastest growing occupations through 2016
* High demand for computer software engineers
* Fairly competitive, considering computers and mobile devices will be needed more in the future
* **High expectations from the employer to create new software**

**Why This Job Appeals to Me**

* I like to work with computers
* I like to work with the new technology and innovations
* I like to solve problems logically
* I like to work with problems of the fields of math and science
* I like to create and evaluate my projects (creating new kinds of software and assess it)