

Uvod v računalništvo

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6th edition

Invitation to Computer Science

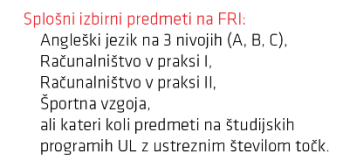
G. Michael Schneider
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International
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Prvi letnik sestavlja deset obveznih predmetov. V drugem letniku sta dva obvezna, sedem strokovnih izbirnih in en splošni izbirni predmet. V tretjem letniku sta poleg enega obveznega, štirih strokovnih izbirnih in enega splošnega izbirnega predmeta na predmetniku še delovna praksa in diplomsko delo.



Computer science is the study of computers.

“Computer science is no more about computers than astronomy is about telescopes, biology is about microscopes, or chemistry is about beakers and test tubes.”

--- Fellows & Parberry, 1993

Computer science is the study of how to
write computer programs.

Computer science is the study of the uses and applications of computers and software.

محمد بن موسى الخوارزمي

Abu Ja'far Muhammad ibn Musa Al-Khowarizmi



Algorithm

Computer science is the study of algorithms, including:

- Their formal and mathematical properties;
- Their hardware realizations;
- Their linguistic realizations;
- Their applications.

Algorithm is a well-ordered collection of unambiguous and effectively computable operations that, when executed, produces a result and halts in a finite amount of time.

... a well-ordered collection ...

... of unambiguous and effectively computable operations ...

... that produce a result ...

... and halts in a finite amount of time.

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- Sequential operations
- Conditional operations
- Iterative operations

If we can specify an algorithm to solve a problem,
then we can automate its solution.



Read the...

Fine print!

Take away lesson #P1

Computer engineers/scientists are problem solvers.