Philippe Choquette
Saint-Augustin-de-Desmaures (Quebec)
Form: http://www.pcosmos.ca/contact/

PROGRAMMING SKILLS

- Scripts: SAS (BASE, STAT, GRAPH, IML, Macros), R, Stata
- Databases: SQL, PL-SQL
- Object oriented: C++, Java
- Formatting: LaTeX
- Others: C, Fortran, HTML, PHP

EDUCATION

Master's degree in computer science (machine learning) 2007
Université Laval, Quebec City

Bachelor's degree in statistics 2003
Université Laval, Quebec City

Certificate in computer science 2004
Université Laval, Quebec City

WORK EXPERIENCE

Advisor, Data Science 2016-Now
Desjardins, Levis

- Do the operational models and regulatory models backtesting. Data is produced with SAS and presented with Power BI.
- Follow and produce the list of the Potentially Uninsured Loans.
- Follow the Enterprise Credit Risk Rating System strategy. Data is produced with SAS and presented with Excel and Power BI.
- Validate and trigger the production of the Behavioral Rating.
- Produce the reports on the enterprise predelinquency strategy.
- Produce monthly the operational models scores and ratings replication.
- Produce monthly the historical Loss Given Default conciliation.
- Produce monthly the table that feeds enterprise granting follow-up.
- Optimize and automate productions written in SAS.
- Detect and investigate upstream the anomalies in produced or consumed tables.

IT Consultant 2012–2015
Facilité Informatique, placed at Desjardins
General Insurances Group, Levis

- Process sponsor lists of potential clients with SAS for postal and telephone solicitation.
- Follow up on regular postal, telephone and electronic solicitation. Create Excel reports with SAS.
- Produce dashboards with SAS to show a refined segmentation of sales summaries.
- Draw winners of contests, using SAS, with the objective of increasing consumer traffic.

C++ and Fortran Programmer 2008-2012
SAFI Quality Software Inc., Quebec City

- Create graphical interfaces of three calculators with MFC in C++.
- Program in C++ a class that produces a report, with all the input and output data, and the graphics of a calculator in MHTML.
- Program the encoding of image files into base64.
- Use HOOPS (of Tech Soft 3D) in Fortran.
- Create Word 2007 documents in C++/CLI.

Stata Programmer (part-time) 2001–2004
Centre for International Studies and Cooperation and
Economics Department of Université Laval, Quebec City

- Program an interface in Stata software to:
  - calculate a statistic (a total, ratio, proportion or average) and the variance of its estimator depending on a population
  - draw samples
  - estimate the statistic along with the variance of its estimator.
- Use of strata, quotient method and two-stage sampling.

Consultant (part-time) Autumn 2003
Université Laval, Service de consultation statistique, Quebec City

- Conduct interviews with students of various departments to answer questions about modelling and data analysis methods (Service offered under the Help for research students).

SAS Programmer Summer 2003
Ministère des Ressources naturelles, de la Faune et des Parcs, Quebec City

- Do simple, multiple, linear and nonlinear regressions on dendrometry data with SAS.
- Use of proc nlin and proc model.
- Resort to weighted or robust regressions in many cases of unfulfilled assumptions.
- Infer totals and proportions valid for a wood species for the entire Quebec forest.

SAS Programmer (part-time) 2003
Experts-conseils Statex, Quebec City

- Reply to occasional survey data processing requests.
- Do descriptive analysis with SAS.
- Format summary reports in Word.

Statistician (internship) Summer 2002
Centre for International Studies and Cooperation, Quebec City

- Continue the sampling application programming with Stata.
- Do correspondence analysis with SPSS and Stata.
- Develop commands for Stata to get the factor scores of row items and to add supplementary variables (non-contributing) in a correspondence analysis.
- Structure and analyze survey data from Chad.

SAS Programmer Summer 2001
Ministère des Transports, Quebec City

- Empirically choose an estimator for annual average daily traffic (AADT).
- Design, with SAS, a document model presenting hourly average volumes, monthly distribution and rush hour list, with this data as graphics, for any traffic section.
- Examine error types produced by vehicle classification algorithms, through SAS simulation.
- Validate the data of the 1999 On road survey (more than 150 variables to validate).
- Do a principal component analysis of this data with SAS.
- Do an in depth study of the SAS macros.

ACHIEVEMENTS

by Parent and Childset Accessible Syntax Tree Language 2008–2016

Create a programming language that eases self-modifying code and program an interpreter in C for it. To see the documentation on the Internet: http://www.pcosmos.ca/pcastl/

3D Face Screensaver 2004–2012

Program in C and in C++ a screensaver with OpenGL. To download or to see the screen captures: http://www.pcosmos.ca/opengl/?lang=en